

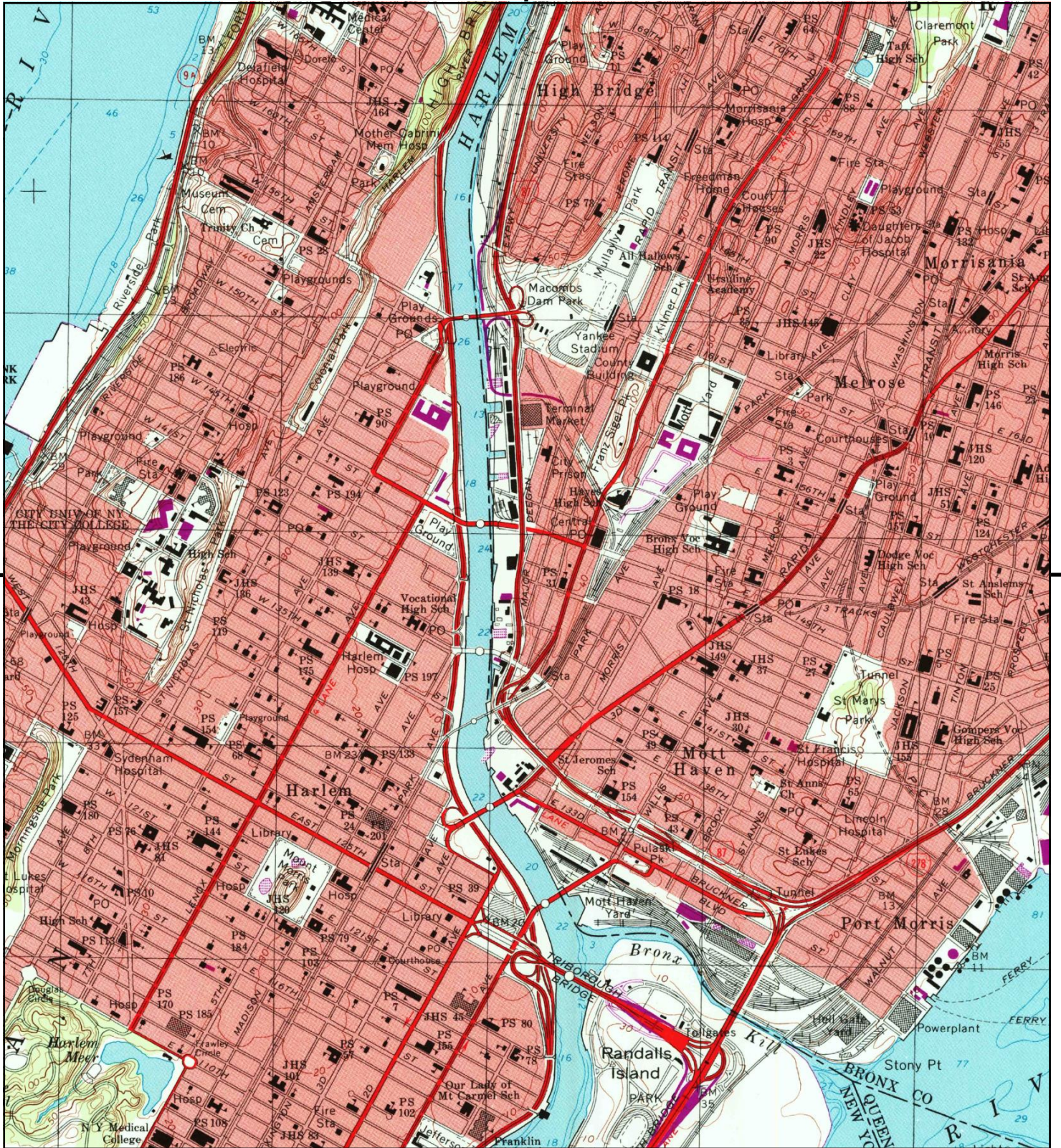
This report includes information from the following map sheet(s).



TP, Central Park, 2013, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





This report includes information from the following map sheet(s).



TP, Central Park, 1997, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





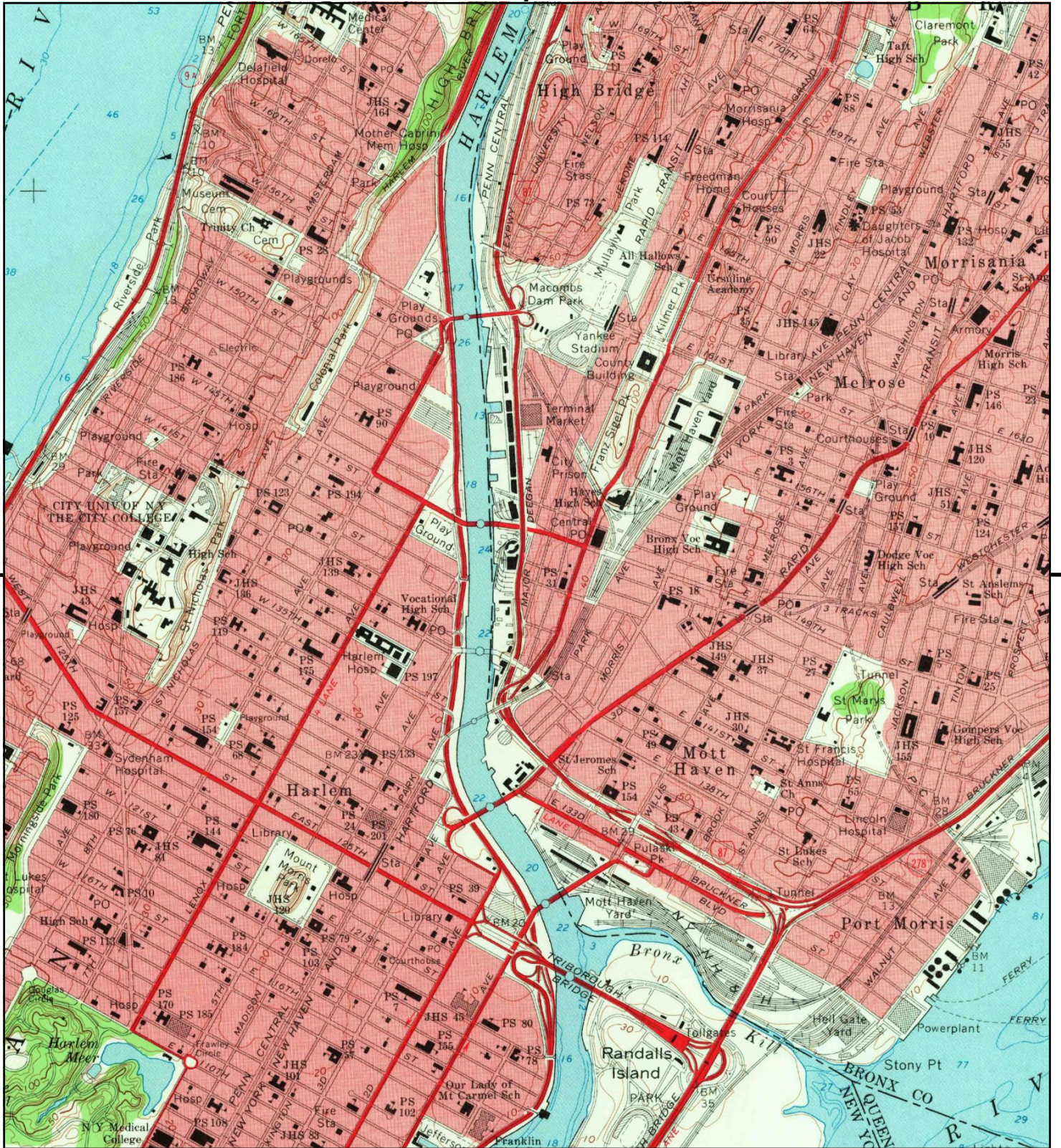
This report includes information from the following map sheet(s).



TP, Central Park, 1979, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





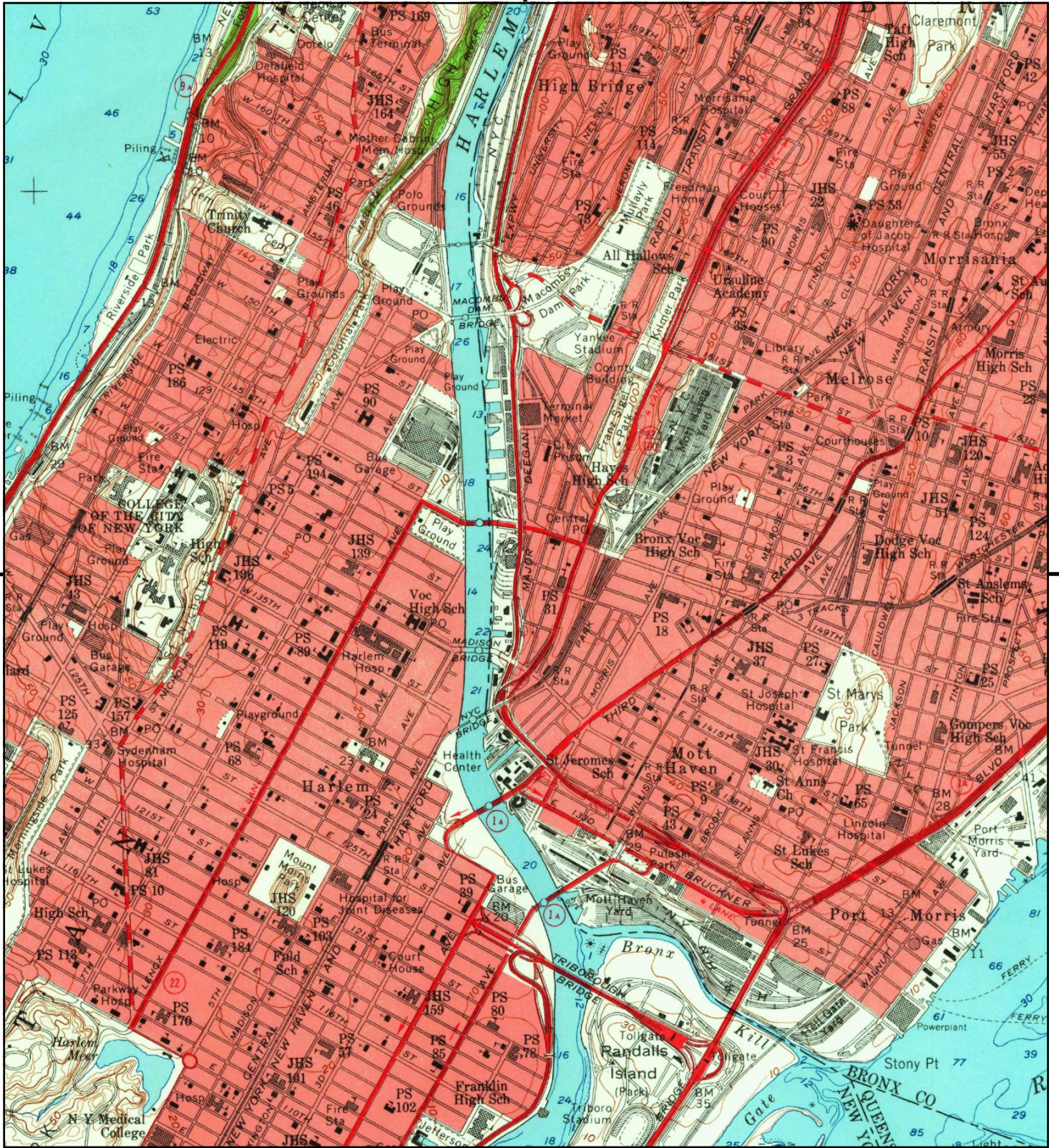
This report includes information from the following map sheet(s).



TP, Central Park, 1966, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





This report includes information from the following map sheet(s).



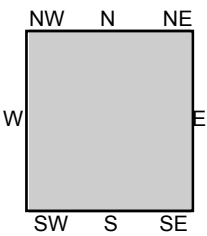
TP, Central Park, 1956, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





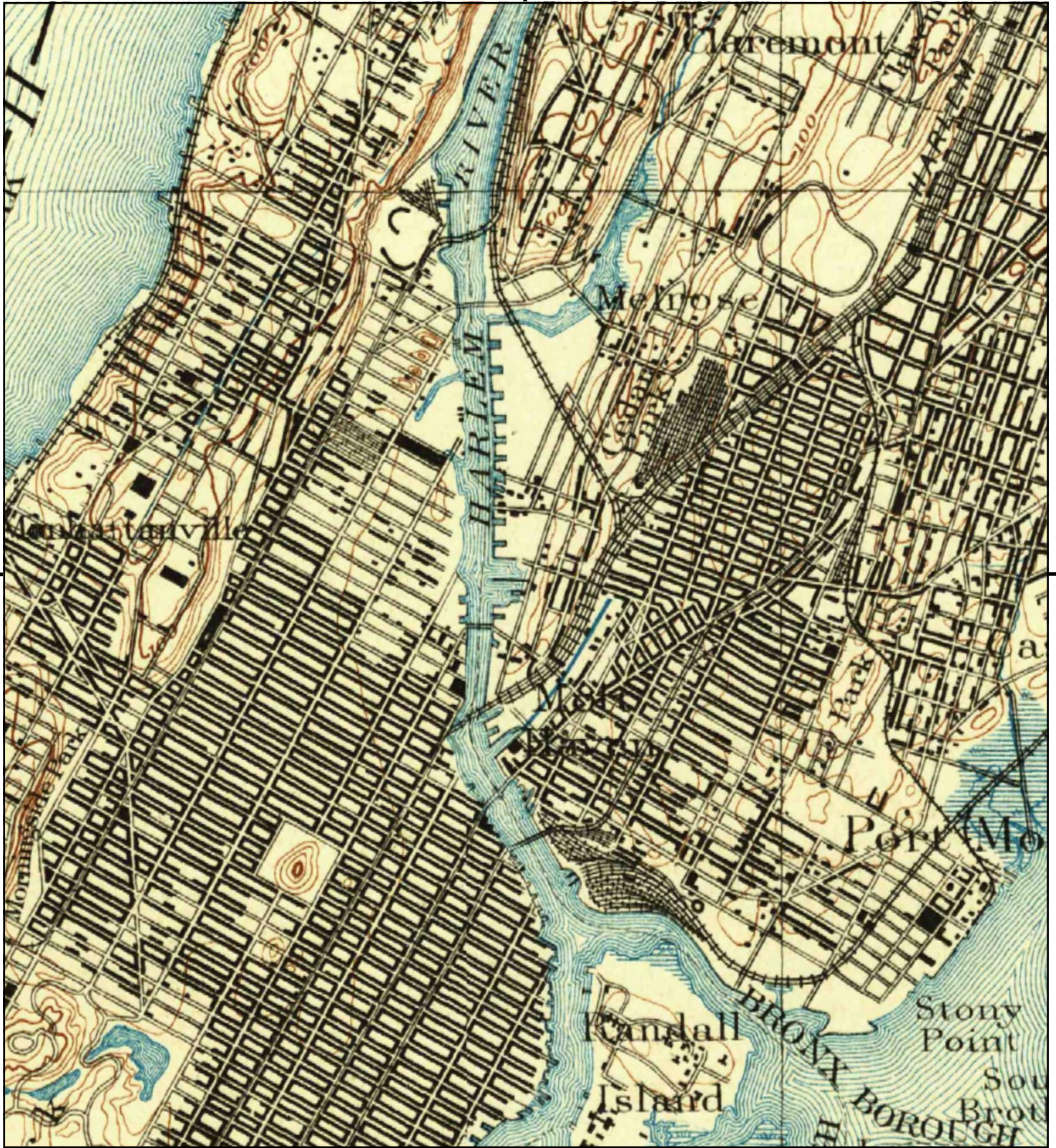
This report includes information from the following map sheet(s).



TP, Central Park, 1947, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





This report includes information from the following map sheet(s).



TP, Harlem, 1900, 15-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





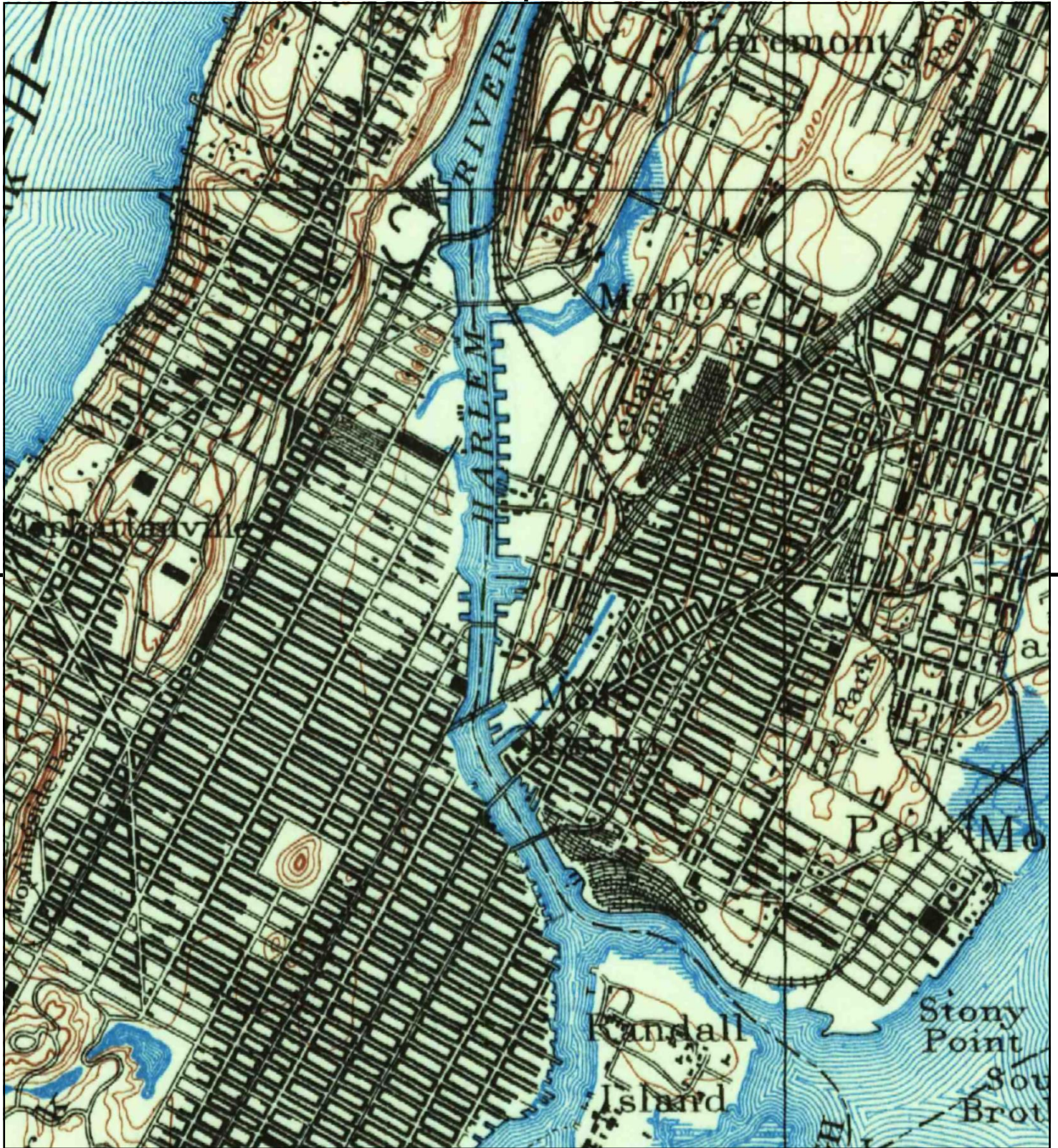
This report includes information from the following map sheet(s).



TP, Harlem, 1898, 15-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





This report includes information from the following map sheet(s).



TP, Harlem, 1897, 15-minute

SITE NAME: 404 Exterior Street
ADDRESS: 404 Exterior Street
Bronx, NY 10451
CLIENT: Langan Engineering, Inc.



APPENDIX J

City Directory Abstract

404 Exterior Street

404 Exterior Street
Bronx, NY 10451

Inquiry Number: 5589479.5
March 14, 2019

The EDR-City Directory Abstract

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1927 through 2014. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 200 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2014	EDR Digital Archive	-	X	X	-
2010	EDR Digital Archive	-	X	X	-
2005	Hill-Donnelly Information Services	-	X	X	-
2000	Cole Information Services	-	X	X	-
1993	New York Telephone	-	X	X	-
1983	New York Telephone	-	X	X	-
1976	New York Telephone Company	-	X	X	-
1971	New York Telephone	-	X	X	-
1965	New York Telephone Company	-	X	X	-
1961	New York Telephone	-	X	X	-
1956	New York Telephone	-	X	X	-
	New York Telephone	X	X	X	-

EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
1949	New York Telephone	-	X	X	-
	New York Telephone	X	X	X	-
1940	New York Telephone	-	X	X	-
1931	Manhattan and Bronx Directory Publishing Company Residential Directory	-	X	X	-
1927	New York Telephone	-	X	X	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

<u>Address</u>	<u>Type</u>	<u>Findings</u>
417 Gerard Avenue	Client Entered	X
445 Gerard Avenue	Client Entered	X
445 Maj Wm Deegan Boulevard	Client Entered	
385 Gerard Avenue	Client Entered	X
441 River Avenue	Client Entered	
445 River Avenue	Client Entered	X
444 Gerard Avenue	Client Entered	X
121 East 144 Street	Client Entered	
120 East 144 Street	Client Entered	X

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

404 Exterior Street
Bronx, NY 10451

FINDINGS DETAIL

Target Property research detail.

EXTERIOR

404 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1956	METRO DECORATG CO INC PAINTG CONTRS	New York Telephone
	METRO INDUSTRL PAINTING CO INC	New York Telephone
1949	TEXACHEM CORP	New York Telephone

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

E 144

100 E 144

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1965	ROYNAT CORP	New York Telephone Company
1961	ROYNAT CORP	New York Telephone
	STANART PRINTED SPECIALTY CO INC	New York Telephone
1956	ROYNAT CORP	New York Telephone
1949	ROYNAT CORP	New York Telephone

101 E 144

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	LOWY EDW J DR B	New York Telephone Company
1971	LOWY EDW J DR B	New York Telephone
1965	LOWY EDW J DR B	New York Telephone Company
1961	LOWY EDW J DR B	New York Telephone
1956	LOWY EDW J DR B	New York Telephone
1949	KEM LABS	New York Telephone
	LOWY EDW J SC DB	New York Telephone

120 E 144

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	PANORAMIC INDUSTRIES INC	New York Telephone
	MILEDYS RESTAURANT	New York Telephone
1983	PANORAMIC INDUSTRIES INC	New York Telephone
	LIGHTMORE B	New York Telephone
	EGGLESTON OFC EQUIPT CO INC	New York Telephone
1976	CROSSWAY COFFEE SHOP INC	New York Telephone Company
	CROSSWAY COFFEE SHOPS	New York Telephone Company
	EGLESTON OFC EQUOPT CO INC	New York Telephone Company
	LIVING WALLS INC	New York Telephone Company
	MODUMATIC INDUSTRIES INC	New York Telephone Company
	VALTRONIC CORP THE	New York Telephone Company
1971	COSMOS LIGHTING CORP	New York Telephone
	CROSSWAY COFFEE SHOP INC	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1971	CROSSWAY COFFEE SHOPS	New York Telephone
	EGGLESTON OFC EQUIPT COLOC	New York Telephone
	LUXCRAFT INC IMPS	New York Telephone
	VALTRONIC CORP THE	New York Telephone
1965	COSMOS LIGHTING CORP	New York Telephone Company
	CROSSWAY COFFEE SHOPS	New York Telephone Company
	LUXCRAFT INC IMPS	New York Telephone Company
1961	GERARD LUNCHEONETTE INC	New York Telephone
	SAW REALTY CO	New York Telephone
1956	DURALITE CO INC	New York Telephone
	GERARD LUNCHEONETTE INC	New York Telephone
	STATE DENTAL TECHNICIAN S INC DNTL LAB	New York Telephone
1949	GENL BAKING CO BRNX BL & ROSEWD	New York Telephone

E 144TH

100 E 144TH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1931	Prince Eveleyn	Manhattan and Bronx Directory Publishing Company Residential Directory
1927	Manzo M rags & paper	New York Telephone

101 E 144TH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1940	Amer Franklin Olean Tiles inc warehse	New York Telephone
	Franklin Tile Co	New York Telephone
	Olean Tile Co	New York Telephone

110 E 144TH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1931	Bishop Dorothy	Manhattan and Bronx Directory Publishing Company Residential Directory

120 E 144TH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1940	Bakery	New York Telephone
	Genl Baking Co Exec off	New York Telephone
	Equity Const Co	New York Telephone

FINDINGS

E 144TH ST

120 E 144TH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Webers Online 1s	Hill-Donnelly Information Services
	Tori Realty Corp 2 F	Hill-Donnelly Information Services
2000	TORI REALTY CORP	Cole Information Services

East 144 Street

120 East 144 Street

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Tori Realty Corp 2 F	Hill-Donnelly Information Services
	Webers Online 1s	Hill-Donnelly Information Services
2000	TORI REALTY CORP	Cole Information Services
1993	MILEDYS RESTAURANT	New York Telephone
	PANORAMIC INDUSTRIES INC	New York Telephone
1983	EGGLESTON OFC EQUIPT CO INC	New York Telephone
	LIGHTEMORE B	New York Telephone
	PANORAMIC INDUSTRIES INC	New York Telephone
1976	CROSSWAY COFFEE SHOP INC	New York Telephone Company
	CROSSWAY COFFEE SHOPS	New York Telephone Company
	EGLESTON OFC EQUOPT CO INC	New York Telephone Company
	LIVING WALLS INC	New York Telephone Company
	MODUMATIC INDUSTRIES INC	New York Telephone Company
	VALTRONIC CORP THE	New York Telephone Company
1971	COSMOS LIGHTING CORP	New York Telephone
	CROSSWAY COFFEE SHOP INC	New York Telephone
	CROSSWAY COFFEE SHOPS	New York Telephone
	EGGLESTON OFC EQUIPT COLOC	New York Telephone
	LUXCRAFT INC IMPS	New York Telephone
	VALTRONIC CORP THE	New York Telephone
1965	COSMOS LIGHTING CORP	New York Telephone Company
	CROSSWAY COFFEE SHOPS	New York Telephone Company
	LUXCRAFT INC IMPS	New York Telephone Company
1961	GERARD LUNCHEONETTE INC	New York Telephone
	SAW REALTY CO	New York Telephone
1956	DURALITE CO INC	New York Telephone
	GERARD LUNCHEONETTE INC	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1956	STATE DENTAL TECHNICIAN S INC DNTL LAB	New York Telephone
1949	GENL BAKING CO BRNX BL & ROSEWD	New York Telephone
1940	Equity Const Co	New York Telephone
	Genl Baking Co Exec off	New York Telephone
	Bakery	New York Telephone

EXTERIOR

385 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	BORAX PAPER PRODS INC	New York Telephone

399 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	AMBOY BUS CO	New York Telephone
	ATLANTIC HUDSON INC	New York Telephone

440 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	SMIR ADVTNG & PROMOTION STORAGE	New York Telephone
	ALLIED OUTDOOR ADVTNG INC	New York Telephone
1983	ALLIED OUTDOOR ADVTNG INC	New York Telephone
1976	MANDELL & CORSINI MECHANICAL CONSTR CORP	New York Telephone Company
1965	POLLACK NORMAN H ATTY	New York Telephone Company
1956	CITY CINDER SUPL CORP	New York Telephone
	MANHATN & BRONX CINDER SUPL CO INC	New York Telephone
1949	CITY CINDER SUPL CORP	New York Telephone
	LA ROCCA ANTHONY C B	New York Telephone
	LA ROCCA ANTHONY C INC CONTRS	New York Telephone
	MANHATN & BRONX CINDER SUPL CO INC	New York Telephone
	DOLLAN PETER F B	New York Telephone

441 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1983	DITZLER AUTOMOTIVE FINISHES PPG INDUSTRIES INC	New York Telephone
1976	DITZLER COLOR DIV OF PPG INDUSTRIES INC	New York Telephone Company

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	DITZLER AUTOMOTIVE FINISHES-P P G INDUSTRIES INC	New York Telephone Company
	DITZLER AUTOMTV FINISHES	New York Telephone Company
1971	DITZLER AOTOMTV FINISHES	New York Telephone
	DITZLER COLOR DIV OF PPG INDUSTRIES INC	New York Telephone
	DITZLER AUTOMOTIVE FINISHES P P G INDUSTRIES INC	New York Telephone
1965	DITZLER COLOR DIV OF PITTSBURGH PLATE GLASS CO	New York Telephone Company
1961	DITZLER COLOR DIV OF PITTSBURGH PLATE GLASS CO	New York Telephone

445 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1983	NATIONAL PLYWOOD CO INC	New York Telephone
	DIMENSIONAL INDUSTRIES LTD	New York Telephone
	FLAX STEPHEN G B	New York Telephone
1976	NATL PLYWD CO INC	New York Telephone Company
1971	NATL PLYWD CO INC	New York Telephone
1965	NATL PLYWOOD CO INC	New York Telephone Company
1961	NATL PLYWOOD CO INC	New York Telephone
1956	NATL PLYWOOD CO INC	New York Telephone
1949	NATL PLYWOOD CO INC	New York Telephone

Exterior St

325 Exterior St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	INTERNTAL PRIVATE CAR SVC INC	EDR Digital Archive
	INTERNTAL PRIVATE CAR SVC INC	EDR Digital Archive

355 Exterior St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	JC FOOD SYSTEM INC	EDR Digital Archive
	KIMS PROVISION CO INC	EDR Digital Archive
	LEE & GIANT FOOD SYSTEM INC	EDR Digital Archive
	JC FOOD SYSTEM INC	EDR Digital Archive
	KIMS PROVISION CO INC	EDR Digital Archive
	LEE & GIANT FOOD SYSTEM INC	EDR Digital Archive
2010	LEGITO INC	EDR Digital Archive

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	LEGITO INC	EDR Digital Archive

399 Exterior St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	ATLANTIC EXPRESS TRNSP CORP	EDR Digital Archive
	AMBOY BUS CO INC	EDR Digital Archive
	ATLANTIC EXPRESS TRNSP CORP	EDR Digital Archive
	AMBOY BUS CO INC	EDR Digital Archive

EXTERIOR ST

399 EXTERIOR ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Tract	Hill-Donnelly Information Services
	Amboy Bus Co Inc	Hill-Donnelly Information Services
	Atlantic Hudson Inc	Hill-Donnelly Information Services
2000	AMBOY BUS CO	Cole Information Services
	ATLANTIC HDSN INC	Cole Information Services

440 EXTERIOR ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Clear Channel Outdoor is	Hill-Donnelly Information Services
	Universal Outdoor Inc 1 s	Hill-Donnelly Information Services
2000	UNIVERSAL OTDR INC	Cole Information Services
1940	Dollan Peter F Inc rubbish	New York Telephone
	Manhatn & Bronx Cinder Supply Co	New York Telephone
1931	Cerulla Pasquale	Manhattan and Bronx Directory Publishing Company Residential Directory

441 EXTERIOR ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1940	Pittsburgh Plate Glass Co	New York Telephone

449 EXTERIOR ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1940	Goldberg Jacob b	New York Telephone

FINDINGS

GERARD AVE

417 GERARD AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Glasstown Inc	Hill-Donnelly Information Services
2000	GASSTOWN INC	Cole Information Services
1993	GLASSTOWN INC	New York Telephone
1976	ALTYPE FIRE DOOR CORP	New York Telephone Company

Gerard Avenue

385 Gerard Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2005	Multi Unit Address 385 Gerard Av LLC	Hill-Donnelly Information Services	
	American Housewares Mfg Corp	Hill-Donnelly Information Services	
	Angora Novelty Corp I R	Hill-Donnelly Information Services	
	Jerry Elsner Co	Hill-Donnelly Information Services	
	John Nguyen Woodworking Inc	Hill-Donnelly Information Services	
	Loveline Industries Inc	Hill-Donnelly Information Services	
	Perfect Shoulder Inc	Hill-Donnelly Information Services	
	Rosa Mark Copy Svc 1 s	Hill-Donnelly Information Services	
	Salzberg Creations Inc R	Hill-Donnelly Information Services	
	Sleeping Partners	Hill-Donnelly Information Services	
	Snap N Wear	Hill-Donnelly Information Services	
	2000	ABRAM EMB NOAH	Cole Information Services
		ALL-TCH WR PRDCTS	Cole Information Services
AMRCN HSWRS MFG		Cole Information Services	
ANGORA NOVLT CORP		Cole Information Services	
BARCLAY BUILDING		Cole Information Services	
CHILDRENS WEAR MFR		Cole Information Services	
ELSNER JRRY CO INC		Cole Information Services	
KORAM TRADING CO		Cole Information Services	
LVLN INDSTRS INC		Cole Information Services	
LYNN YARN CORP		Cole Information Services	
S & S INDSTRS INC		Cole Information Services	
SPORT SCREEN INC	Cole Information Services		
1993	ALPER INC	New York Telephone	
	AMERICAN HOUSEWARES MFG CORP	New York Telephone	
	ANGORA NOVELTY CORP TOYS	New York Telephone	
	ATLAS H & H INC	New York Telephone	

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	BARCLAY BUILDING	New York Telephone
	BORDA PRODUCTS INC	New York Telephone
	CHILDRENS WEAR MR	New York Telephone
	CROSS PATCH LTD	New York Telephone
	ELSNER JERRY CO INC TUR TOYS	New York Telephone
	HAMBURGER FRANK E PATTERNS	New York Telephone
	KORAM PRNTNG & TRADING CO	New York Telephone
	LOVELLNE INDSTRIES INC	New York Telephone
	LYNN YARN CORP	New York Telephone
	ROYAL SEWING CO INC	New York Telephone
	S & S INDUSTRIES INC	New York Telephone
	SPORT SCREEN INC	New York Telephone
	SUNGMIN FASHIONS INC	New York Telephone
	WHITE METAL JEWELRY EQUIP CORP	New York Telephone
1983	ALPER INC	New York Telephone
	ANGORA NOVELTY CORP TOYS	New York Telephone
	AUTOMATIC WIRE GOODS MFG CO INC	New York Telephone
	BARCLAY BUILDING	New York Telephone
	BLOOMCRAFT INC	New York Telephone
	ELSNER JERRY CO INC FUR TOYS	New York Telephone
	I SIMON INC	New York Telephone
	LYNIN JAMES INC	New York Telephone
	LYNN YARN CORP	New York Telephone
	M & M CARPENTER	New York Telephone
	ROYAL SEWING CO INC	New York Telephone
	S & S INDUSTRIES INC	New York Telephone
	WHITE METAL JEWELRY EQUIPT CORP	New York Telephone
	1976	AUTOMATIC WIRE GOODS MFG CO INC
BALTIC INDUSTRIES INC		New York Telephone Company
BLOOMCRAFT INC		New York Telephone Company
I SIMON INC		New York Telephone Company
JACOBY BENDER INC		New York Telephone Company
LION RIBBON CO		New York Telephone Company
NOMAL SPORTSWR		New York Telephone Company
ROYAL SEWING CO INC		New York Telephone Company
S & S INDUSTRIES INC WIRE PRODUCTS		New York Telephone Company

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	SIMCO SHOE STORES OFFICE WAREHOUSE	New York Telephone Company
	TAURONE LABEL COINC	New York Telephone Company
	WALKER H M B	New York Telephone Company
	WEINFELD AARON SPORTSWR	New York Telephone Company
	WUNDERWEAR MILLS INC	New York Telephone Company
1971	ALLEN HOLLANDER CO INC LABLS	New York Telephone
	AMICO INSTRMNT CORP	New York Telephone
	AUTOMATIC WIRE GOODS MFG CO INC	New York Telephone
	BARCLAY BUILDING	New York Telephone
	BLOOM CHAS INC	New York Telephone
	COXEN PRESS	New York Telephone
	INTERNATL SALT CO	New York Telephone
	INTERNATL SALT CO WRHSE	New York Telephone
	LION RIBBON AFFILIATES	New York Telephone
	LION RIBBON CO	New York Telephone
	ROYAL SEWING CO	New York Telephone
	ROYAL SEWING CO	New York Telephone
	S & S INDUSTRIES INC	New York Telephone
	S & S INDUSTRIES INC	New York Telephone
	S & S INDUSTRIES INC WIRE PRODUCTS	New York Telephone
	SIMCO SHOE STORES OFC & WRHSE	New York Telephone
	STANDARD NOVELTY BOX CO INC	New York Telephone
	WUNDERWEAR MILLS INC	New York Telephone
	WERNER PRNTNG & LITHOGRAPH CO	New York Telephone
	1965	ABLE LABELS
ABLE-STIK		New York Telephone Company
ABSORBO BEER PAD CO INC		New York Telephone Company
AEROMARINE INSTRUMENT CO INC OFC & FCTY		New York Telephone Company
ALLEN HOLLANDER CO INC LABIS		New York Telephone Company
AMICO INSTRMNT CORP		New York Telephone Company
ANTOVILLE MILTON F B		New York Telephone Company
AUTOMATIC WIRE GOODS MFG CO INC		New York Telephone Company
BARCLAY BUILDING		New York Telephone Company
BARCLAY MFG CO INC TILE BD		New York Telephone Company
BARCLITE CORP OF AMER		New York Telephone Company

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1965	BERLISS ARTHUR D JR B	New York Telephone Company
	BLOOM CHAS INC	New York Telephone Company
	BRASSIERE ACESRIES LTD	New York Telephone Company
	COXEN PRESS	New York Telephone Company
	HARMAC MFG CO	New York Telephone Company
	HOLLANDER ALLEN CO INC	New York Telephone Company
	HOLLANDER S LABELS	New York Telephone Company
	HOLLANDER STANLEY LABELS	New York Telephone Company
	INSTRUMENTOOL CORP THE	New York Telephone Company
	INTERNATL SALT CO WRHSE	New York Telephone Company
	RINEL CONTRCTG CO	New York Telephone Company
	ROYAL SEWING CO	New York Telephone Company
	ROYAL SEWING CO	New York Telephone Company
	ROYBAR CORP	New York Telephone Company
	ROYBAR CORP TILE BD	New York Telephone Company
	S & S INDUSTRL PRODS CORP	New York Telephone Company
	S & S INDUSTRIES INC WIRE PRODS	New York Telephone Company
	STANDARD NOVELTY BOX CO INC	New York Telephone Company
	TAURONE LABEL CO INC	New York Telephone Company
	WERNER PRNTNG & LITHO CO	New York Telephone Company
WUNDERWEAR MILLS INC	New York Telephone Company	
1961	ABLE LABELS	New York Telephone
	ABLE STIK	New York Telephone
	ABSORBO BEER PAD CO INC	New York Telephone
	AEROMARINE INSTRUMENT CO INC OFC & FCTY	New York Telephone
	ALLEN HOLLANDER CO INC LABLS	New York Telephone
	AMICO INSTRMNT CORP	New York Telephone
	ANTOVILLE MILTON F B	New York Telephone
	AUTOMATIC WIRE GOODS MFG CO INC	New York Telephone
	BARCLAY BUILDING	New York Telephone
	BARCLAY MFG CO INC TILE BD	New York Telephone
	BARCLITE CORP OF AMER	New York Telephone
	BERLISS ARTHUR D JR B	New York Telephone
	BRASSLERE ACESRIES LTD	New York Telephone
	COUNTY MACH & TOOL CO	New York Telephone
	COXEN PRESS	New York Telephone
	CROWN STATIONERS	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1961	DEPENDABLE SHOES INC	New York Telephone
	HARMAC MFG CO	New York Telephone
	HOLLANDER ALLEN CO INC	New York Telephone
	HOLLANDER S LABELS	New York Telephone
	HOLLANDER STANLEY LABELS	New York Telephone
	ICON PRODS INC	New York Telephone
	INSTRUMENTOOL CORP THE	New York Telephone
	INTERNATL SALT CO INC WRHSE	New York Telephone
	ROBEE MFG CO INC HNDBG ORNMTS	New York Telephone
	ROYAL SEWING CO	New York Telephone
	ROYAL SEWING CO	New York Telephone
	ROYBAR CORP	New York Telephone
	ROYBAR CORP TILE BD	New York Telephone
	S & S INDUSTRL PRODS CORP	New York Telephone
	S & S INDUSTRIES INC WIRE PRODS	New York Telephone
	STANDARD NOVELTY BOX CO INC	New York Telephone
	TAURONE LABEL CO INC	New York Telephone
	WERNER PRNTNG & LITHO CO	New York Telephone
	1956	ABLE STIK
ABSORBO BEER PAD CO INC		New York Telephone
ABSORBO PRODS CORP		New York Telephone
AEROMARINE INSTRUMENT CO INC OFC & FCTY		New York Telephone
ALLEN HOLLANDER CO INC LABELS		New York Telephone
AUTOMATIC WIRE GOODS MFG CO INC		New York Telephone
BARCLAY BUILDING		New York Telephone
BARCLITE CO RP OF AMERICA		New York Telephone
BLOOM CHAS INC		New York Telephone
BRONX TERMNL BONDED WAREHOUSE CO INC		New York Telephone
COXEN PRESS		New York Telephone
CRAIG SUPL CORP		New York Telephone
CROWN DIE CASTING CO		New York Telephone
CROWN DIE CASTING CO		New York Telephone
CROWN STATIONERS		New York Telephone
DUNLOP TIRE & RUBR CORP		New York Telephone
HARMAC SPORTSWR CO		New York Telephone
HOLLANDER ALLEN CO INC		New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1956	HOLLANDER HAROLD SANFORD LABLS	New York Telephone
	HOLLANDER S LABELS	New York Telephone
	HOLLANDER STANLEY LABELS	New York Telephone
	INSTRUMENTOOL CORP THE	New York Telephone
	INTERNATL SALT CO INC	New York Telephone
	LINBRO MFG CORP	New York Telephone
	MANOR-MADE SHOES INC	New York Telephone
	MATISSE BROS INC LENSES	New York Telephone
	MCCABE KNITTING MILLS	New York Telephone
	ROBEE MFG CO INC HNDBG ORNMTS	New York Telephone
	ROYAL SEWING CO	New York Telephone
	ROYBAR CORP TILE BD	New York Telephone
	RULAND PAUL E INC WOOLNS	New York Telephone
	STANART PRINTED SPECIALTY CO INC	New York Telephone
	STANDARD NOVELTY BOX CO INC	New York Telephone
	STERLING ELEC MOTORS INC	New York Telephone
	TAURONE LABEL CO INC	New York Telephone
	TAURONE LABEL CO INC	New York Telephone
	WERNER PRNTNG & LITHO CO	New York Telephone
1949	AEROMARINE INSTRUMENT CO INC OFC & FCTY	New York Telephone
	ALGENE STUDIOS HND PAINTED TEXTLS	New York Telephone
	AQUA SYSTM INC	New York Telephone
	ATLANTIC LIQUOR WHOLESALER	New York Telephone
	BARCLAY MFG CO INC TILE BD	New York Telephone
	BRONX LEHIGH BLDG	New York Telephone
	BRONX TERM BONDED WAREHOUSE CO INC	New York Telephone
	COXEN PRESS	New York Telephone
	CREST VIEW WINES INC	New York Telephone
	CRESTWICK INC PUBLS	New York Telephone
	CROWN DIE CASTING CO	New York Telephone
	DEMON TRUCKING CORP	New York Telephone
	DUNLOP TIRE & RUBR CORP	New York Telephone
	HELLER CANDY CO INC	New York Telephone
	INTERNATL SALT CO INC	New York Telephone
	MANHATN GROCERY CO	New York Telephone
	MANHATN QUALITY STORE WAREHSE	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1949	MATISSE BROS LENSES	New York Telephone
	NEPTUNE METER CO	New York Telephone
	ROYBAR CORP TILE BD	New York Telephone
	RULAND PAUL E INC WOOLNS	New York Telephone
	STANDARD UNBREAKABLE WATCH CRYSTALS INC	New York Telephone
	UNIT VENETIAN BLIND SUPL CORP	New York Telephone
	URFER ADOLF B	New York Telephone
	ZIERICK MFG CORP METL STMPNGS	New York Telephone
1940	Barclay Mfg Corp	New York Telephone
	Bronx Lehigh Bldg	New York Telephone
	Bronx Term Bonded Warehouse Co Inc	New York Telephone
	Bronx Terminal Celery Co Exterior &	New York Telephone
	Capitol Wine & Spirit Corp	New York Telephone
	Consolidated Dougherty Card Co Inc	New York Telephone
	Cookes Foods Inc	New York Telephone
	Davis Harry liqrs	New York Telephone
	Dunlop Tire & Rubber Corp	New York Telephone
	Frigidaire Div Genl Motors Sales Carp Genl office	New York Telephone
	Svce	New York Telephone
	G & H Refrigtn Sales & Svce Corp	New York Telephone
	Gersen Geo H b	New York Telephone
	Hahr Walter b	New York Telephone
	Br wrhse	New York Telephone
	Indepndnt Salt Co ofc	New York Telephone
	Marshuetz S N C liqrs	New York Telephone
	Matisse Bros lenses	New York Telephone
	Pokrass Louis Liqrs	New York Telephone
	Standard Novelty Box Co Inc	New York Telephone
Standard Unbreakable Watch Crystals Inc	New York Telephone	
Wolfsie Sportswr Inc knit gds	New York Telephone	
Zierick Mfg Corp metl stmpgs	New York Telephone	

417 Gerard Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Glasstown Inc	Hill-Donnelly Information Services
2000	GASSTOWN INC	Cole Information Services
1993	GLASSTOWN INC	New York Telephone
1976	ALTYPE FIRE DOOR CORP	New York Telephone Company

FINDINGS

444 Gerard Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Omega	Hill-Donnelly Information Services
2000	OMEGA	Cole Information Services
1993	SAGE PLUMBING & HEATING CORP	New York Telephone
1971	RODNEY MAINTNCE CORP	New York Telephone
1965	RODNEY MAINTNCE CORP	New York Telephone Company
	RODNEY MAINTNCE CORP	New York Telephone Company
1961	FEM CORP GARGE	New York Telephone
	FEM CORP TAXIS	New York Telephone
	FLUR HERMAN L INS	New York Telephone
1956	FEM CORP GARGE	New York Telephone
	FEM CORP TAXIS	New York Telephone
	FLUR HERMAN L INS	New York Telephone
	FREDOR CAB INC	New York Telephone

445 Gerard Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	AAA Glass & Mirror Supis	Hill-Donnelly Information Services
	Jesse Shapiro & James Glass	Hill-Donnelly Information Services
2000	AAA GLS & MIR SUPLS	Cole Information Services
	JESSE SHAPIRO & JMS	Cole Information Services
	SHAPIRO & JAMES CRP	Cole Information Services
1993	A STONE SVCES	New York Telephone
	AAA GLASS & MIRROR SUPLS	New York Telephone
	ALL HANDS DISPOSABLE INC	New York Telephone
	JESSE SHAPIRO & JAMES GLASS CORP	New York Telephone
	SHAPIRO & JAMES JESSE GLASS CORP	New York Telephone
	STONE SERVICES INC	New York Telephone
1983	A STONE SVCES	New York Telephone
	JESSE SHAPIRO & JAMES INC	New York Telephone
	STONE SERVICES INC	New York Telephone
1976	KUSTOM AUTO COLLISION	New York Telephone Company
1971	LENOX MAINTENANCE CORP	New York Telephone
1965	SUPER ADJSTMT CO	New York Telephone Company
	SUPER OPERATING CORP	New York Telephone Company
1961	SUPER OPERATING CORP	New York Telephone
1956	SUPER OPERATING CORP	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1949	DELMART SVCE CORP GARAGE	New York Telephone
	DELMART SVCE CORP GARAGE	New York Telephone
1940	Gehn Harry auto parts	New York Telephone
	Harrigan Auto Parts Co Inc	New York Telephone
	Philco Sales & Svce Corp radios	New York Telephone
1927	Gehn Harry Auto Co	New York Telephone

RIVER AVE

390 RIVER AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Schiff Bernard r	New York Telephone
	Sherman Max S r	New York Telephone

400 RIVER AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Hinrichs Robt P r	New York Telephone

River Avenue

445 River Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Biesenthal I C r	New York Telephone
	Corsin E H Lewinski Dr r	New York Telephone
	Fisk Franklin Dr r	New York Telephone
	Fisk Franklin Dr r	New York Telephone
	Fiske Franklin D O office	New York Telephone
	Residence	New York Telephone
	Residence	New York Telephone
	Fiske Franklin D O office	New York Telephone
	Friedlander Geo S r	New York Telephone
	Goldwater Henry r	New York Telephone
	Jacoby Philip S r	New York Telephone
	Kiene Wm O C r	New York Telephone
	King I Strickland r	New York Telephone
	Leit Frances Mrs r	New York Telephone
	Leit Gertrude Miss r	New York Telephone
	Mayer Philip r	New York Telephone
	Mc Hvaine Ruth Miss r	New York Telephone
	Morrow Alice r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Naimska Zofia Miss r	New York Telephone
	Schultz O R r	New York Telephone
	Weed R W r	New York Telephone

RIVER DR

400 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Applebaum Ralph r	New York Telephone
	Walton Elizabeth Miss r	New York Telephone
	Vassar Geo W r	New York Telephone
	Taber E W Miss r	New York Telephone
	Slattery Lawrence J r	New York Telephone
	Reidy Richard r	New York Telephone
	Reidy Catherine M Mrs r	New York Telephone
	Potter Edw r	New York Telephone
	Lincoln Edmond E r	New York Telephone
	Lincoln Edmond E r	New York Telephone
	Lawson Robt Mrs r	New York Telephone
	Knight Fred S r	New York Telephone
	Jedel M Mrs r	New York Telephone
	Hershfield R N r	New York Telephone
	Fuller Robt H r	New York Telephone
	Fowler Court Apts	New York Telephone
	Yelland Wm H r	New York Telephone
	Borden Mary Mrs r	New York Telephone
	Cohen Nathan r	New York Telephone

404 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Tilson Frank H r	New York Telephone
	Bailey Jas S Jr Mrs r	New York Telephone
	Spielberg Harold r	New York Telephone
	Simon Robert E	New York Telephone
	Residence	New York Telephone
	Modra Roman L I	New York Telephone
	Gould Harry r	New York Telephone
	Elman Saul r	New York Telephone
	Blum Henri r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	White Thos r	New York Telephone
	Williams Roger Butler Jr r	New York Telephone
	Amdur S r	New York Telephone
	Strathmore The	New York Telephone

410 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	REINHOLD S	New York Telephone
1927	Stephens Anna C Mrs r	New York Telephone
	Valentine Laura Miss r	New York Telephone
	Tobin H A r	New York Telephone
	Black Lula Miss r	New York Telephone
	Black Mary Miss r	New York Telephone
	Burrows F W r	New York Telephone
	Chave W G r	New York Telephone
	Constantian Raphael Dr r	New York Telephone
	Ford Jean r	New York Telephone
	Frank Meyer r	New York Telephone
	Frank Sam r	New York Telephone
	Jones Ruth B Miss r	New York Telephone
	Klion Saml M r	New York Telephone
	Lewis B Palmer CS	New York Telephone
	Residence	New York Telephone
	Luckstone Harold C r	New York Telephone
	Luckstone Isidore studio	New York Telephone
	Luckstone Maurice E r	New York Telephone
	Mooney Paul C r	New York Telephone
	Perlman J M r	New York Telephone
	Phillips Leonore Miss r	New York Telephone
	Phillips Nettie Miss r	New York Telephone
	Ring Geo J r	New York Telephone
	Rosen Zara B Mrs ins	New York Telephone
	Sandberg Bertha r	New York Telephone
	Stenz B F r	New York Telephone
	Willard W R r	New York Telephone

414 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Murdock Beatrice E T Mrs r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Merrill Marion C Mrs r	New York Telephone

415 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Sigma Chi Fraternity	New York Telephone

417 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Goodman David C r	New York Telephone
	Grant John L r	New York Telephone
	Grant Louis M r	New York Telephone
	Grant Margery F Miss r	New York Telephone
	Harrison Rebecca Miss r	New York Telephone
	Hurd Chas F Jr r	New York Telephone
	Johnson Walter E r	New York Telephone
	Keeley Wm J r	New York Telephone
	Lissman Edw Rev r	New York Telephone
	Ludington R B Dr r	New York Telephone
	Oakley H Wayne r	New York Telephone
	Sakamoto S r	New York Telephone
	Tobin M r	New York Telephone
	Van Ness Frank H r	New York Telephone
	Wilson W J Jr r	New York Telephone
	Amer Vault Co Bklyn	New York Telephone
	Night & Sunday calls	New York Telephone
	Arrowood S D r	New York Telephone
	Bry Louis r	New York Telephone
	Cliff Haven Apts	New York Telephone
	Couch John R Mrs r	New York Telephone
	Friedman Jos r	New York Telephone
	Gibbons J M Dr r	New York Telephone
	Gilligan Edw A r	New York Telephone
	Goldberg Isidore r	New York Telephone

418 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Heidelberg Morris H r	New York Telephone

FINDINGS

420 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Markel Michael r	New York Telephone
	Mayer Clarence S r	New York Telephone
	Michelman I Mrs r	New York Telephone
	Miller Harris r	New York Telephone
	Pauly Hedwig Mrs r	New York Telephone
	Pearsall Harry C r	New York Telephone
	Perrow J r	New York Telephone
	Sanborn James F r	New York Telephone
	Schappert Chas L r	New York Telephone
	Schere R Richard r	New York Telephone
	Smith Ada C Mrs r	New York Telephone
	Strasbourg Minnie Z Mrs r	New York Telephone
	Udell Jerome I r	New York Telephone
	Ulen Earl C r	New York Telephone
	Underwood K S r	New York Telephone
	Weinstein Saul J r	New York Telephone
	Weinstein Wm J lwyr	New York Telephone
	Residence	New York Telephone
	Witt Max A r	New York Telephone
	Wolff M bonds	New York Telephone
	Residence	New York Telephone
	Wolfsohn Leopold piano studio	New York Telephone
	Wolfsohn Viola Miss artiste	New York Telephone
	Ackermann A Henry r	New York Telephone
	Baldwin B J r	New York Telephone
	Barnett Saml r	New York Telephone
	Bellamore David G r	New York Telephone
	Bergstein Adolph r	New York Telephone
	Berwald A H r	New York Telephone
	Biers Louis D r	New York Telephone
	Residenece	New York Telephone
	Bloch Adolph lwyr	New York Telephone
	Bloch Henry lwyr	New York Telephone
	Residence	New York Telephone
	Blum Morris r	New York Telephone
	Blumlein Arthur Mrs r	New York Telephone
	Broderick Anne M Mrs r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Carroll Peter Jas	New York Telephone
	Del Valle Carlo M MD r	New York Telephone
	Dickinson H B r	New York Telephone
	Frankel Fred r	New York Telephone
	Hall Lewis B Jr r	New York Telephone
	Hamilton Apts	New York Telephone
	Hirsch Leo r	New York Telephone
	Hirsh Nathan moving pictures	New York Telephone
	Residence	New York Telephone
	Hohenstein H r	New York Telephone
	Hubbell John E r	New York Telephone
	Humphrey Henry M r	New York Telephone
	Isaacs Maurice plaiting	New York Telephone
	Residence	New York Telephone
	Kalman A L Mrs r	New York Telephone
	Kalman Dore r	New York Telephone
	Kalman Lester A r	New York Telephone
	Kann Geo E r	New York Telephone
	Kaufman M Zenn r	New York Telephone
	Kaufman May Zenn r	New York Telephone
	Kendall L Z r	New York Telephone
	Kross Isidor Dr off	New York Telephone
	Residence	New York Telephone
	Kuhne Paul r	New York Telephone
	Lavalle Helen Miss r	New York Telephone
	Lavat W C r	New York Telephone
	Lehrer Henry Dr dntst	New York Telephone
	Levis Robt P Mrs r	New York Telephone
	Residence	New York Telephone
	Levy Michael jeweler	New York Telephone

423 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Comptons Geo Brokaw	New York Telephone

425 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Alvord Gladys Miss r	New York Telephone
	Bach Phil M	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Residence	New York Telephone
	Berman Philip r	New York Telephone
	Bernard Agnes Mrs r	New York Telephone
	Butler Louis M r	New York Telephone
	Cowen Gertrude F	New York Telephone
	Curran Jas J r	New York Telephone
	Dalton W A coml supt Manh	New York Telephone
	Residence	New York Telephone
	Devaney Thos F r	New York Telephone
	Eggert W F r	New York Telephone
	Force A E r	New York Telephone
	Frese Fred r	New York Telephone
	Friml Rudolpl r	New York Telephone
	Fullerton Edw Darcy r	New York Telephone
	Gerson Louis M r	New York Telephone
	Gluck Moses r	New York Telephone
	Glucksman Harry L r	New York Telephone
	Goldberg Shepard J Mrs r	New York Telephone
	Goldstein M Mme r	New York Telephone
	Greenfield Harry r	New York Telephone
	Greenwald Jerome E r	New York Telephone
	Grey Marie r	New York Telephone
	Gruner Clarence E r	New York Telephone
	Haberman Wm r	New York Telephone
	Residence	New York Telephone
	Holmes Bayard P lwyr	New York Telephone
	Jacobs V A r	New York Telephone
	Katz Saml r	New York Telephone
	Kinsie Paul M r	New York Telephone
	Klinkowstein M Mrs r	New York Telephone
	Korn Fannie Mrs r	New York Telephone
	Korn Harold I r	New York Telephone
	Landesman Ernest W r	New York Telephone
	Lintz M H r	New York Telephone
	Man Letchie Robt M r	New York Telephone
	Marks Celia F r	New York Telephone
	Matthews Frank C Dr ofc	New York Telephone
	Mead Marcia arch	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Melcher Margaret S Dr r	New York Telephone
	Mellon Geo W MD r	New York Telephone
	Meyer Morris r	New York Telephone
	Minsky Morton r	New York Telephone
	Minsky Ruth G r	New York Telephone
	Mougenthau Eugene r	New York Telephone
	Morris Clayton r	New York Telephone
	Muller Harold C DDS off	New York Telephone
	Nicols Julia Mrs r	New York Telephone
	Norton A Warren r	New York Telephone
	O Brien Wm r	New York Telephone
	Peel John P r	New York Telephone
	Pettit Carolyn Mrs r	New York Telephone
	Peyser Kaufman r	New York Telephone
	Platt Murray M r	New York Telephone
	Quinn I M r	New York Telephone
	Raffloer Ernest Mrs r	New York Telephone
	Raffloer W D r	New York Telephone
	Rebbane Fred W r	New York Telephone
	Resor R P r	New York Telephone
	Rice Nathaniel J r	New York Telephone
	Robinson Abbot S r	New York Telephone
	Rosen Harry E r	New York Telephone
	Rosenbaum Gustav r	New York Telephone
	Rudd Margaret Miss r	New York Telephone
	Sackheim Ida Mrs r	New York Telephone
	Residence	New York Telephone
	Schubart Henry A	New York Telephone
	Schwartz Benj r	New York Telephone
	Seeman Fredk R r	New York Telephone
	Shroyer Geo E r	New York Telephone
	Simons Dorothy r	New York Telephone
	Smith Chas V r	New York Telephone
	Springer Mordecai P r	New York Telephone
	Stecker Jack r	New York Telephone
	Sterling E M r	New York Telephone
	Street A W Mrs r	New York Telephone
	Residence	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Sturtz Samuel lwyr	New York Telephone
	Swain Henry D Mrs r	New York Telephone
	Tannenbaum Harold	New York Telephone
	Tannenbaum Max rl est	New York Telephone
	Residence	New York Telephone
	Tannenbaum Wm	New York Telephone
	Van Pelt Wm D atty	New York Telephone
	Warder Anna I Mrs r	New York Telephone
	Residence	New York Telephone
	Weber Jos lwyr	New York Telephone
	Wells Clifton K r	New York Telephone
	Wells Morgan C r	New York Telephone
	Wollheim Saml r	New York Telephone

431 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Bartnett W J r	New York Telephone
	Larimore Louise D Dr r	New York Telephone
	Taylor Jas A Mrs r	New York Telephone
	Brockett Francis S r	New York Telephone
	Brown Renie r	New York Telephone
	Ferris Theodore E r	New York Telephone
	Gwalter L Ivimy Miss r	New York Telephone
	Larimore D T Mrs r	New York Telephone
	Smith Alex r	New York Telephone
	Larimore Louise D Dr r	New York Telephone
	Lecatis A r	New York Telephone
	Leeds Edw L r	New York Telephone
	Mc Court James r	New York Telephone
	Neiman Max r	New York Telephone
	Philips Fredericka P Mrs r	New York Telephone
	Seager Ilka K r	New York Telephone

432 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Hirsch Eugenie Mrs r	New York Telephone

FINDINGS

434 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Schlesinger Julius CPA	New York Telephone
	Aigner Martin r	New York Telephone
	Residence	New York Telephone
	Schooley Ella Miss r	New York Telephone

435 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Schauffler Frederick H	New York Telephone
	Shenk Jos r	New York Telephone
	Bushman Edw L r	New York Telephone
	Callender Jas P r	New York Telephone
	Clark Wm M r	New York Telephone
	Colter Jos r	New York Telephone
	Germain Max r	New York Telephone
	Lasdon Milton A r	New York Telephone
	Lasdon Oscar r	New York Telephone
	Lasdon Saml D r	New York Telephone
	Mc Guire Jos Hubert r	New York Telephone
	Rumely Edw A r	New York Telephone
	Residence	New York Telephone

436 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Residence	New York Telephone
	Nagel Harold DDS	New York Telephone

440 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Sweeney Winfield H r	New York Telephone
	Viola Emily Mme beauty parlor	New York Telephone
	Residence	New York Telephone
	Strauss L L elec signs	New York Telephone
	Stapleton Chas W r	New York Telephone
	Simon Morton r	New York Telephone
	Silverman J r	New York Telephone
	Ryan Jas L r	New York Telephone
	Royer Harry B r	New York Telephone
	Robinson Clark r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Ritchie J W r	New York Telephone
	Riegger Constantin r	New York Telephone
	Paterno Apt	New York Telephone
	Moore Florence Miss r	New York Telephone
	Macnamara E J r	New York Telephone
	Lewis Phyllis A Mrs r	New York Telephone
	Landers Marsden H r	New York Telephone
	Kohn Stuart M r	New York Telephone
	Ingalls Will C r	New York Telephone
	Amos B F r	New York Telephone
	Atteridge Harold r	New York Telephone
	Brandon Stuart K r	New York Telephone
	Elias M tailor	New York Telephone
	Hazen Elizabeth S r	New York Telephone

445 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Jacoby Philip S r	New York Telephone
	Kiene Wm O C r	New York Telephone
	King I Strickland r	New York Telephone
	Leit Frances Mrs r	New York Telephone
	Leit Gertrude Miss r	New York Telephone
	Mayer Philip r	New York Telephone
	Mc Hvaine Ruth Miss r	New York Telephone
	Morrow Alice r	New York Telephone
	Naimska Zofia Miss r	New York Telephone
	Schultz O R r	New York Telephone
	Weed R W r	New York Telephone
	Biesenthal I C r	New York Telephone
	Corsin E H Lewinski Dr r	New York Telephone
	Fisk Franklin Dr r	New York Telephone
	Fisk Franklin Dr r	New York Telephone
	Fiske Franklin D O office	New York Telephone
	Residence	New York Telephone
	Residence	New York Telephone
	Fiske Franklin D O office	New York Telephone
	Friedlander Geo S r	New York Telephone
	Goldwater Henry r	New York Telephone

FINDINGS

461 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Dowie Wm G r	New York Telephone

FINDINGS

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

<u>Address Researched</u>	<u>Address Not Identified in Research Source</u>
100 E 144	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1940, 1931, 1927
100 E 144TH	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940
101 E 144	2014, 2010, 2005, 2000, 1993, 1983, 1940, 1931, 1927
101 E 144TH	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1931, 1927
110 E 144TH	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1927
120 E 144	2014, 2010, 2005, 2000, 1940, 1931, 1927
120 E 144TH	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1931, 1927
120 E 144TH ST	2014, 2010, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
120 East 144 Street	2014, 2010, 1931, 1927
121 East 144 Street	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
325 Exterior St	2014, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
325 Exterior St	2014, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
355 Exterior St	2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
355 Exterior St	2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
385 EXTERIOR	2014, 2010, 2005, 2000, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
385 Gerard Avenue	2014, 2010, 1931, 1927
390 RIVER AVE	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
399 EXTERIOR	2014, 2010, 2005, 2000, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
399 EXTERIOR ST	2014, 2010, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
399 Exterior St	2014, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
399 Exterior St	2014, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
400 RIVER AVE	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
400 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931

FINDINGS

Address Researched

Address Not Identified in Research Source

404 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
410 RIVER DR	2014, 2010, 2005, 2000, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
414 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
415 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
417 GERARD AVE	2014, 2010, 1983, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
417 Gerard Avenue	2014, 2010, 1983, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
417 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
418 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
420 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
423 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
425 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
431 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
432 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
434 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
435 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
436 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
440 EXTERIOR	2014, 2010, 2005, 2000, 1971, 1961, 1940, 1931, 1927
440 EXTERIOR ST	2014, 2010, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1927
440 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
441 EXTERIOR	2014, 2010, 2005, 2000, 1993, 1956, 1949, 1940, 1931, 1927
441 EXTERIOR ST	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1931, 1927
441 River Avenue	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
444 Gerard Avenue	2014, 2010, 1983, 1976, 1949, 1940, 1931, 1927
445 EXTERIOR	2014, 2010, 2005, 2000, 1993, 1940, 1931, 1927
445 Gerard Avenue	2014, 2010, 1931
445 Maj Wm Deegan Boulevard	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927

FINDINGS

Address Researched

445 River Avenue

445 RIVER DR

449 EXTERIOR ST

461 RIVER DR

Address Not Identified in Research Source

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1931, 1927

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched

404 Exterior Street

Address Not Identified in Research Source

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1940, 1931, 1927

APPENDIX K

Environmental Lien Search

404 Exterior Street

404 Exterior Street
Bronx, NY 10451

Inquiry Number: 5589479.7
March 15, 2019

EDR Environmental Lien and AUL Search

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

404 Exterior Street
404 Exterior Street
Bronx, NY 10451

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found Not Found

RESEARCH SOURCE

Source 1:

New York City Register of Deeds
Bronx, NY

PROPERTY INFORMATION

Deed 1:

Type of Deed: Indenture
Title is vested in: Rocket Jewelry Box Inc
Title received from: 101 East 144th Street Corp
Deed Dated: 9/4/1969
Deed Recorded: 9/11/1969
Book: 116
Page: 217
Volume: NA
Instrument: NA
Docket: NA
Land Record Comments: see exhibit
Miscellaneous Comments: NA

Legal Description: see exhibit

Legal Current Owner: Rocket Jewelry Box Inc

Parcel # / Property Identifier: Block: 2351 Lot: 1

Comments: see exhibit

Deed Exhibit 1

Dr.
6050

RF 29 1/67 Standard N.Y.H.T.U. Form 8002 Bargain and Sale Deed, with Covenant against Grantor's Acts - Individual or Corporation (single Sheet)

CONSULT YOUR LAWYER BEFORE SIGNING THIS INSTRUMENT — THIS INSTRUMENT SHOULD BE USED BY LAWYERS ONLY.

REEL 116 PAGE 217

THIS INDENTURE, made the 4th day of September, nineteen hundred and sixty-nine

BETWEEN

101 EAST 144th STREET CORP., a New York Corporation
having its principal office at #101 East 144th Street, The Bronx, New York,

party of the first part, and ROCKET JEWELRY BOX, INC. a domestic

corporation and its principal office at 172-174 E 144th Street, Bronx, New York

party of the second part,

WITNESSETH, that the party of the first part, in consideration of Ten Dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Borough and County of the Bronx, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the easterly side of Major Deegan Boulevard (Exterior Street) and the northerly side of East 144th Street; thence EASTERLY along the northerly side of East 144th Street, 100.10 feet;
thence NORTHERLY, parallel with the easterly side of Major Deegan Boulevard, 81.90 feet;
thence WESTERLY along a line which forms an angle of 73 degrees 20 minutes 30 seconds on its southerly side with the last mentioned course, 104.38 feet to the easterly side of Major Deegan Boulevard;
thence SOUTHERLY along the easterly side of Major Deegan Boulevard, 47.46 feet to the corner aforesaid, the point or place of Beginning.

Said Premises now being known as and by the Street Number 404 Exterior Street.

The premises herein conveyed shall not be used as a body and fender automobile repair shop for a period of five years from the date of this instrument.

This conveyance is made with the unanimous consent of the shareholders of the party of the first part.

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof; TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises; TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid. AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose. The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF:

101 EAST 144th STREET CORP.,

Alfred L. Palladino

BY:

ALFRED L. PALLADINO, President

REEL 116 218

STATE OF NEW YORK, COUNTY OF

On the day of 19 , before me personally came

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that executed the same.

STATE OF NEW YORK, COUNTY OF

On the day of 19 , before me personally came

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that executed the same.

REAL ESTATE TRANSFER TAX STATE OF NEW YORK Dept of Taxation SEP 11 '69 & Finance 60.50

STATE OF NEW YORK, COUNTY OF Brown

On the 4 day of September 19 69, before me personally came Alfred L. Palladino to me known, who, being by me duly sworn, did depose and say that he resides at No. 135 MacKay Drive, Tenafly, New Jersey that he is the President of 101 East 144th Street Corp.

the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation, and that he signed his name thereto by like order.

STATE OF NEW YORK, COUNTY OF

On the day of 19 , before me personally came

the subscribing witness to the foregoing instrument, with whom I am personally acquainted, who, being by me duly sworn, did depose and say that he resides at No.

that he knows to be the individual described in and who executed the foregoing instrument; that he, said subscribing witness, was present and saw execute the same; and that he, said witness, at the same time subscribed his name as witness thereto.

MILTON SILVER Notary Public in and for the State of New York No. 249 257 Exp. March 30, 1970

Bargain and Sale Deed With Covenant Against Grantor's Acts

Title No. 706 5976

TO

STANDARD FORM OF NEW YORK BOARD OF TITLE UNDERWRITERS Distributed by INTER-COUNTY TITLE GUARANTY and MORTGAGE COMPANY CHARTERED 1927 IN NEW YORK

SECTION 9 BLOCK 2-55-1 LOT 1 COUNTY OR TOWN Brown

Revised At Request of INTER-COUNTY Title Guaranty and Mortgage Company RETURN BY MAIL TO

Stanley M. Katz, Esq, 99 Park Avenue New York, N.Y. Reg No. 10016

RECORDED AT THE OFFICE OF THE TITLE GUARANTY COMPANY

RESERVE THIS SPACE FOR USE OF RECORDING OFFICE... OFFICE OF CITY REGISTER BROOKLYN... REC. FEE \$ 6.00 SEC. \$ 4995 TAX PAID

APPENDIX L

Resumes

Ryan Manderbach, CHMM

Associate

Environmental Engineering & Site Assessments



15 years in the industry

Mr. Manderbach has experience in New York, New Jersey, Massachusetts, Maine, Rhode Island, New Hampshire, and Connecticut. His recent experience includes New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup, Voluntary Cleanup and Spill Programs, and New York City Office of Environmental Remediation (OER) E-designated site investigation, and remediation. He has managed and performed Phase I and II Environmental Site Assessments; Underground Storage Tank (UST) removals and closures; soil vapor intrusion investigations; and site investigations and remediation. He also has extensive experience with Hazard Ranking System (HRS) evaluations, site assessments, removal actions, and emergency response activities under the EPA Regions I and II Superfund program.

Selected Projects

- Brownfield Redevelopment, 520 West 41st Street, New York, NY
- Riverside Parcel 1, 3, 4 and 5, Mixed-Use Development, New York, NY
- Brownfield Redevelopment, 267-273 West 87th Street, New York, NY
- Brownfield Redevelopment, 225 33rd Street, Brooklyn, NY
- River Place Residential, SMP Implementation, New York, NY
- Mixed-Use Educational/Residential Development, New York, NY
- Public Safety Answering Center (PSAC) II, Bronx, NY
- American Copper Buildings (616 First Avenue), New York, NY
- Environmental Assessments at 430 East 92nd Street, New York, NY
- Environmental Assessments at 125th Street and Lenox, New York, NY
- Hotel at 70 Park Avenue, New York, NY
- Environmental Due Diligence at Mixed-Use Development, 85 Jay Street, Brooklyn, NY
- 346 Broadway Due Diligence, New York, NY
- Liberty Brass Site, 38-01 Queens Boulevard, Long Island City, NY
- Environmental Remediation, 42 West Street Residential, Brooklyn, NY
- Brownfield Redevelopment, 335 Bond Street, Brooklyn, NY
- Residences at 540 West 21st Street, New York, NY
- International Leadership Bronx Charter School, Bronx, NY
- President Street Properties, Brooklyn, NY
- Residential Development, 43-30 24th Street, Long Island City, NY
- Mixed-Use Condominium, 505-513 West 43rd Street, New York, NY
- 685 First Avenue, New York, NY
- Columbia University, Manhattanville Development, New York, NY
- The Shops at Atlas Park, Glendale, NY
- 536 West 41st Street, New York, NY
- Shore Parkway, Brooklyn, NY
- 100 West 125th Street, New York, NY
- 11 North Moore Street, New York, NY

Education

B.A., Environmental Analysis and Policy
Boston University

Professional Registration

Certified Hazardous Materials Manager (CHMM)

40 Hour HAZWOPER

Affiliations

New York Building Congress (NYBC),
Young Professionals Committee

American Council of Engineering Companies of New York (ACEC NY) –
Emerging Leaders Committee

Ryan Manderbach, CHMM

- 290 West Street, New York, NY
- City University of New York (CUNY), John Jay College Expansion, New York, NY
- Queens West Development, Long Island City, NY
- United Nations Capital Master Plan, New York, NY
- Former Air Products and Chemicals, Inc. Facility, Middlesex, NJ
- Lower Manhattan Indoor Dust Test and Clean Program, New York, NY
- Former Buckbee-Mears Facility, Cortland, NY
- Old Landfill, Norton, MA
- Boulter Farm Area, Cumberland, RI
- Hollingsworth & Vose Co., Walpole, MA
- Chlor-Alkali Facility (Former), Berlin, NH
- Limerick Mill Complex, Limerick, ME
- Danielson Pike Chlorinated Solvent Sites, Scituate, RI
- Tiogue Lake Sediment Contamination Site, Coventry, RI
- Atlas Copco Sites, Holyoke, MA
- Fisherville Mill, Grafton MA
- Hurricane Katrina Federal Disaster Response, New Orleans, LA
- Hurricane Ike Federal Disaster Response, Pasadena, TX

BRIAN GOCHENAUR, QEP

SENIOR PROJECT MANAGER

ENVIRONMENTAL SCIENTIST

Mr. Gochenaur is an environmental project manager whose experience includes environmental due diligence, site investigation and remediation, fuel oil storage tank investigation and removal, soil vapor intrusion assessments, in-situ remedial technology, spill closure, vapor barrier and sub-slab depressurization system design and construction, emergency response, environmental and geotechnical site investigations, and health and safety monitoring. He has extensive experience with the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup, Voluntary Cleanup and Spill Programs and New York City Department of Environmental Protection (NYCDEP) "E" Designated and New York City Voluntary Cleanup Program (BCP) sites. His areas of expertise include Phase I Environmental Site Assessments, Phase II Site Investigations, and environmental consulting and oversight on large scale construction projects.

SELECTED PROJECTS

- 440 Washington Street, E-Designated services, New York, NY
- 3514 Surf Avenue, Tall Residential and Retail Building, Brooklyn, NY
- ARO 242 West 53, Tall Residential Building, New York, NY
- NY Aquarium Shark Exhibit, Soil Characterization and Excavation Oversight, Coney Island Neighborhood, Brooklyn, NY
- 60 West Street, Site Investigation and Redevelopment, Brooklyn, NY
- 535 4th Avenue, BCP Auto Repair Cleanup and Redevelopment, Brooklyn, NY
- 1525 Bedford Avenue, BCP Gas Station Cleanup and Redevelopment, Brooklyn, NY
- 220 Eleventh Avenue, Residential Building, New York, NY
- 432 Rodney Street, Residential Building, Brooklyn, NY
- 563 Sackett Street, Brooklyn, NY
- 362 West 125th Street, Residential Building, New York, NY
- Bedford Armory Redevelopment, Brooklyn, NY
- 268 West Street, BCP Redevelopment of Former Commercial and Industrial Site, New York, NY
- 110 125th Street, Soil Excavation and Remediation, New York, NY
- Former Roseland Ballroom Redevelopment, Soil Characterization and Excavation Oversight, New York, NY
- 42 Crosby Street, "E" Designated Site Investigation and Remediation, New York, NY
- New York School Construction Authority, Various Locations, In-House Environmental Consulting, Five Boroughs of New York City
- EZ Serve Portfolio, GE Capital, Various Phase II Site Investigations, FL, GA, LA, and MS
- Beth Elohim Child Daycare Center, Lead Based Paint Abatement, Brooklyn, NY
- Price Battery, Environmental Protection Agency (EPA) Lead Fallout Superfund Site, Hamburg, PA



EDUCATION

B.S., Environmental
Science
University of Florida

PROFESSIONAL REGISTRATION

Qualified Environmental
Professional (QEP)
certified by the Institute of
Professional
Environmental Practice

40-Hour OSHA
(HAZWOPER)

LANGAN

BRIAN GOCHENAUR, QEP

- Clark Portfolio, GE Capital, Various Phase II Locations, MI, IL, ID, and OH
- Tops Plaza Portfolio, Prudential Real Estate Investors, Various Phase II Locations, NY
- Cingular Wireless Portfolio, Cingular Wireless, Various Locations Phase I and II Locations, WA
- Queens Center Mall Expansion, Remedial Oversight, Elmhurst, NY
- Soka Gakkai International-USA, Cultural Center, Brooklyn, NY

JULIA LEUNG, PE

PROJECT ENGINEER

ENVIRONMENTAL ENGINEERING & WATER RESOURCES

Ms. Leung is an environmental engineer working in the New York Metro area. Her projects involve the investigation and assessment of environmental systems including physical/chemical processes, water chemistry, environmental system analysis, solid waste and water resources engineering, stormwater design and hydrology.

SELECTED PROJECTS

- Phase I ESA, Various Locations, NYC and Westchester County, NY
- Phase II ESI, 412 East 90th Street, New York, NY
- 420 Kent Avenue, Brooklyn, NY
- West and Watts Development, New York, NY
- 203 East 92nd Street, Mixed-Use Building, New York, NY
- BAM North Tower, Brooklyn, NY
- Phase II ESI, FedEx Distribution Facility (830 Fountain Avenue), Brooklyn, NY
- Waste Classification and Lead Delineation Investigation (261 Hudson Street), New York, NY
- Waste Classification Investigation (41-43 East 22nd Street), New York, NY
- Columbia University, Manhattanville Campus, New York, NY
- Riverside Building 5, New York, NY
- Condominium at 200 East 79th Street, New York, NY
- Mercedes Benz of Manhattan (536 West 41st Street), New York, NY
- Phase II ESI (627 Smith Street), Brooklyn, NY
- 340 Court Street, Brooklyn, NY



EDUCATION

M.E., Environmental Engineering
Cornell University

B.S., Biological Engineering
(Environmental Studies Concentration)
Cornell University

PROFESSIONAL REGISTRATION

Professional Engineer (PE)
in NY

10-Hour OSHA

Kyle Twombly

**Senior Staff Scientist
Environmental Engineering**



4 years in the industry

Mr. Twombly is a geologist with experience in New York City. His responsibilities include environmental and construction oversight, data and daily field report management, Phase II Environmental Site Investigations, waste characterizations, and remedial subsurface investigations involving soil, groundwater and soil vapor sampling.

Selected Projects

- Hudson Yards Redevelopment, environmental field oversight, New York, NY
- Sullivan Street Development, environmental field oversight, New York, NY
- 520 West 41st Street, groundwater sampling, New York, NY
- Greenpoint Landing, environmental and geotechnical field oversight, well gauging, Brooklyn, NY
- 601 Washington Street, environmental field oversight, New York, NY
- 521-539 4th Avenue, environmental field oversight, Brooklyn, NY
- 268 West Street, environmental field oversight, New York, NY
- Riverside Center Parcel 1, environmental field oversight, New York, NY
- 86 Fleet Street, Brooklyn, NY
- 416-420 Kent Avenue, environmental field oversight and waste characterization, Brooklyn, NY
- 551 Greenwich Street, remedial investigation including soil, groundwater and soil vapor sampling with report preparation, New York, NY
- 41 Kensico Drive, soil sampling, soil vapor sampling, remedial investigation report preparation, remedial action work plan report preparation, Mount Kisco, NY
- 335 Bond Street, well installation oversight, groundwater sampling, Brooklyn, NY
- Bush Terminal, waste characterization field coordination, Brooklyn, NY
- 450 Union Street, waste disposal oversight, well gauging, Brooklyn, NY
- Brooklyn Navy Yard Building 77, environmental field oversight, Brooklyn, NY
- 111 Varick Street, spill closure report preparation, New York, NY
- Horace Mann School, environmental and geotechnical field oversight, Bronx, NY
- Parcel B West, waste characterization, New York, NY
- 45-49 and 45-57 Davis Street, soil, groundwater and soil vapor sampling, Queens, NY
- 1120 Saint Johns Place, soil, groundwater and soil vapor sampling, Brooklyn, NY
- 225 3rd Street, well installation oversight, indoor air sampling, Brooklyn, NY

Education

B.S., Geoscience
University of Connecticut

Professional Registration

10-Hour OSHA
40-Hour OSHA HAZWOPER

Affiliations

Association of Environmental &
Engineering Geologists
Engineers Without Borders


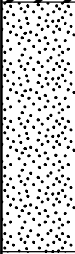
APPENDIX B

SOIL BORING LOGS

I:\LANGAN.COM\DATA\ANYC\DATA0170487001\ENGINEERING DATA\ENVIRONMENTAL\INVESTIGATION\BORING LOGS\RFJ...7/24/2019 7:47:30 PM ... Report Log - LANGAN

Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001				
Location Bronx, NY				Elevation and Datum NA				
Drilling Company AARCO Environmental				Date Started 12/27/18		Date Finished 12/27/18		
Drilling Equipment Geoprobe 7822 DT				Completion Depth 30 ft		Rock Depth NA		
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 6	Undisturbed 0	Core 0
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 14		Completion NA	24 HR. 11.1	
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon				
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough				
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA					

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-30") Black to brown medium SAND, trace silt, trace fine gravel, coal, slag, coal ash, concrete (dry) [FILL]	1	1	MACROCORE	30/60	NA	0.0	Sampled RB01_0-2 at 9:30
		2					2.0	
		3					1.6	
		4					7.1	
		5					2.6	
	R2 (0-24") Brown medium SAND, some silt, trace fine gravel, brick, coal ash, slag (dry-moist) [FILL]	6	2	MACROCORE	24/60	NA		Sampled RB01_9-11 at 9:35
		7					0.4	
		8					0.5	
		9					1.3	
		10					1.0	
	R3a (0-8") Brown medium SAND, some silt, trace fine gravel, brick (moist) [FILL] R3b (8-26") Gray to black fine SAND, trace silt, trace fine gravel, coal (wet) [FILL]	11	3	MACROCORE	26/60	NA		Petroleum like odors
		12					179	
		13					330	
		14					1015	
		15					425	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
	R4 No recovery	15 16 17 18 19 20	4	MACROCORE	0/60	NA	Sampled RB01_14-16 at 9:40	
	R5 No recovery	21 22 23 24	5	MACROCORE	0/60	NA		
	R6a (0-24") Gray, silty CLAY (wet)	25 26				1.2		Sampled RB01_25-27 at 9:45
	R6b (24-51") Reddish-brown, fine SAND (wet)	27 28	6	MACROCORE	54/60	0.3 0.0		
	R6c (51-54") Reddish-brown, medium SAND (wet)	29 30				0.0 0.0		
		31 32 33				0.0 0.0 0.0	End of boring at 30' bgs. MW01 installed at 20', 20-slot screen 5' to 20' screen	

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/26/18		Date Finished 12/26/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Veronica Zuluaga			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BLU/in		
	4-inch concrete slab	0						
	R1 (0-24") Unconsolidated, brown to dark gray, medium SAND, some fine gravel, coal, coal ash, brick, concrete, (dry), [FILL]	1	1	MACROCORE	24/60	NA	0.6	Background PID level: 0.6 ppm Sampled RB02_0-2 at 13:25
		2					0.6	
		3					0.6	
		4						
		5						
		6						
		7						
		8					0.6	
		9					0.6	
		10					0.6	
	R2 (0-32") Medium consolidated, brown to gray, fine SAND, some fine gravel, trace silt, brick, coal, wood, (dry to moist), [FILL]	11	2	MACROCORE	32/60	NA		Sampled RB02_7-9 at 13:30
		12					0.6	
		13					0.6	
		14					0.6	
		15					0.6	
	R3a (0-16") Medium consolidated, brown, fine SAND, trace silt, coal, slag, (dry), [FILL]	16	3	MACROCORE	43/60	NA	0.7	Sampled RB02_10-12 at 13:35
		17					0.7	
		18					0.7	
		19					0.7	
		20					0.7	
	R3b (16-43") Medium consolidated, brown to gray, fine SAND, some silt, wood, concrete [FILL]	21					0.7	Sampled RB02_13-15 at 13:40
		22					0.7	
		23					0.7	
		24					0.7	
		25					0.7	

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Log of Boring

RB02

Sheet

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of

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-48") Very stiff, gray, silty CLAY, (moist)	15	4	MACROCORE	48/60	NA	
		16					0.5
		17					0.5
		18					0.5
		19					0.5
		20					0.5
		21					0.5
		22					0.5
		23					0.5
		24					0.5
		25					0.5
		26					0.5
		27					0.5
		28					0.5
		29					0.5
		30					0.5
		31					0.5
		32					0.5
		33					0.5
							End of boring at 20', Backfilled with cuttings/clean sand to surface grade.


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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/26/18		Date Finished 12/26/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.)		First 13.5	Completion 11.1
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Veronica Zuluaga			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-36") Unconsolidated, dark brown, fine SAND, trace silt, trace fine gravel, coal, coal ash, concrete, (moist) [FILL]	1	1	MACROCORE	36/60	NA	2.2	Background PID level: 1.6 ppm
		2					2.4	
		3					2.6	
		4					120	
		5					161	
		6					2.9	
		7					3.1	
		8						
		9						
		10						
	R2 (0-32") Unconsolidated, dark brown, fine SAND, trace silt, trace fine gravel, coal, concrete, (moist) [FILL]	11	2	MACROCORE	32/60	NA	3.1	Sampled RB03_0-2 at 9:45
		12					3.7	
		13					2.6	
		14					1.7	
	R3 (0-18") Medium consolidated, black, fine gravel, trace fine SAND, coal, coal slag (wet) [FILL]	15	3	MACROCORE	18/60	NA	1.5	Sampled RB03_2-3 at 9:50
		16						
		17						
		18					28	
		19					34	
	20	4.4						
		3.4		Petroleum-like odor and staining				

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4a (0-6") Unconsolidated, black, fine SAND, some fine gravel, coal, (wet) [FILL]	15	4	MACROCORE	36/60	NA	5.2 5.9 8.2 7.2 2.8 4.3
	R4b (6-32") Medium consolidated, dark gray, silty fine SAND, trace clay, (wet)	16					
	R4c (32-36") Medium consolidated, dark gray, fine SAND, some silt, trace fine gravel (wet)	17					
		18					
		19					Organic-like odor
		20					End of boring at 20' bgs, MW03 installed at 25', 20-slot screen from 10 to 25'.
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

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Log of Boring

RB04/RMW04

Sheet

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
X	R4 (0-20") Gray to black fine SAND, some silt, trace clay, trace fine gravel, timber (wet) [FILL]	15	4	MACROCORE	20/60	NA	
		16					
		17					
		18					
		19					0.0
		20					0.0
		21					0.0
		22					0.0
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					
							End of boring at 20' bgs RMW04 installed 24', 20-slot screen from 9' to 24'

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/21/18		Date Finished 12/21/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 21 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 5		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 12.3		Completion NA	24 HR. 12.2
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 4/5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-30") Black to brown to tan fine SAND, trace brick, asphalt, glass, concrete (moist) [FILL]	1	1	MACROCORE	30/48	NA	0.1	Sampled RB05_0-2 at 9:35
		2					0.1	
		3					0.1	
		4					0.1	
	R2 (0-10") Brown to tan fine SAND, concrete (moist) [FILL]	5	2	MACROCORE	10/48	NA	0.1	Sampled RB05_8-10 at 9:40
		6					0.1	
		7					0.1	
		8					0.1	
	R3 (0-20") Brown silty SAND, trace fine gravel, brick (moist) [FILL]	9	3	MACROCORE	20/48	NA	0.1	Sampled RB05_13-15 at 9:50
		10					0.1	
		11					0.1	
		12					0.1	
	R4 (0-20") Brown to black fine SAND, some silt, trace clay, trace fine gravel, brick, wood (moist-wet) [FILL]	13	4	MACROCORE	20/48	NA	0.1	
		14					0.1	
		15						

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001			
Location		Bronx, NY		Elevation and Datum		NA			
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)		
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)	
X	R5 (0-38") Black to gray, fine SAND, some silt, trace clay, trace fine gravel, brick, coal, wood (wet) [FILL]	15	4		20/48		0.1	<p>Switched to 5-foot sampler because shallower material caved in</p> <p>Sampled RB05_19-21 at 10:00</p> <p>End of boring at 21' bgs. MW05 installed at 23', 20-slot screen 8' to 23'</p>	
		16					0.4		
		17							
		18	5	MACROCORE	38/60	NA	0.4		
		19					0.4		
		20					0.4		
		21					0.4		
		22							
		23							
		24							
		25							
		26							
		27							
		28							
		29							
		30							
		31							
		32							
		33							

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data			Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Penetr. resist. BL/6in		
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		16					
		17					
		18					
		19					0.2
		20					0.2
		21					0.2
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

End of boring at 20' bgs,
Backfilled with cuttings/clean
sand to surface grade

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001	
Location Bronx, NY		Elevation and Datum NA	
Drilling Company AARCO Environmental		Date Started 12/20/18	Date Finished 12/20/18
Drilling Equipment Geoprobe 7822 DT		Completion Depth 24 ft	Rock Depth NA
Size and Type of Bit 2-inch direct push macrocore cutting shoe		Number of Samples	Disturbed 6 Undisturbed NA Core NA
Casing Diameter (in) NA	Casing Depth (ft) NA	Water Level (ft.) First 16	Completion NA 24 HR. 12.4
Casing Hammer NA	Weight (lbs) NA	Drop (in) NA	Drilling Foreman Nick Turro
Sampler 4-foot stainless steel macrocore sampler		Field Engineer Tyler Goodnough	
Sampler Hammer NA	Weight (lbs) NA	Drop (in) NA	

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	6-inch concrete slab	0						
	R1 (0-22") Black to brown medium SAND, trace brick (moist) [FILL]	1	1	MACROCORE	22/48	NA	0.0	Sampled RB07_0-2 at 13:00
		2					0.0	
		3					0.0	
	R2a (0-16") Brown coarse SAND, trace brick, trace medium sand, trace fine gravel (moist) [FILL]	4	2	MACROCORE	24/48	NA	0.0	Sampled RB07_6-8 at 13:30
	R2b (16-24") Brown medium SAND, some coarse sand, some silt, trace fine gravel (moist)	5					0.0	
		6					0.0	
	R3 (0-24") Brown medium SAND, some coarse sand, some silt, trace fine gravel (moist)	7	3	MACROCORE	24/48	NA	0.0	Sampled RB07_8-10 at 13:45
		8					0.0	
		9					0.0	
	R4a (0-8") Brown coarse SAND, some medium sand, some silt (moist)	10	4	MACROCORE	21/48	NA	0.0	
		11					0.0	
		12					0.0	
		13					0.0	
		14					0.0	
		15					0.0	

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Log of Boring **RB07/RMW07**

Sheet 2 of 2

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
	R4b (8-11") Deep red coarse GRAVEL (moist)	15	4		21/48		0.0	
	R4c (11-14") Brown coarse SAND, some medium sand, some silt (moist)	16					0.0	
	R5 (0-10") Dark gray-black fine GRAVEL, some coarse sand, some medium sand (wet)	17-20	5	MACROCORE	10/48	NA	0.0	
	R6a (0-22") Dark gray fine SAND, trace silt, trace clay (wet)	21-24	6	MACROCORE	22/48	NA	0.0	Petroleum-like odor
	R6b (22-24") Dark gray-black fine GRAVEL, some coarse sand, some fine sand (wet)	24					0.0	End of boring at 24' bgs. MW07 installed at 24', 20-slot screen 4' to 24'
		25					0.0	
		26					0.0	
		27					0.0	
		28					0.0	
		29					0.0	
		30					0.0	
		31					0.0	
		32					0.0	
		33					0.0	

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/27/18		Date Finished 12/27/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 16.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon			
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA				

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MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-30") Brown to tan medium SAND, trace silt, trace fine gravel, brick, concrete, coal ash (dry) [FILL]	1	1	MACROCORE	30/60	NA	0.0	Sampled RB08_0-2 at 12:45
		2					0.0	
		3					0.0	
		4					0.0	
	R2a (0-30") Brown fine SAND, trace silt, trace fine gravel, brick, coal (moist) [FILL]	5	2	MACROCORE	30/60	NA	0.0	Sampled RB08_10-12 at 12:50
		6					0.0	
		7					0.0	
		8					0.0	
		9					0.0	
		10					0.0	
	R3a (0-16") Brown fine SAND, trace silt, brick, coal, (moist-wet) [FILL]	11	3	MACROCORE	22/60	NA	0.0	Sampled RB08_12-14 at 12:55
		12					0.0	
		13					0.0	
		14					0.0	
	R3b (16-22") Gray silty CLAY	15					0.0	

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Log of Boring

RB08

Sheet

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
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		16						0.0
		17						0.0
		18						0.0
		19						0.0
		20						0.0
		21						
		22						
		23						
		24						
		25						
		26						
		27						
		28						
		29						
		30						
31								
32								
33								

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/2/19		Date Finished 1/2/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 11.5 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 3		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	8-inch concrete slab	0						
	R1 (0-16") Brown to black medium SAND, some fine gravel, asphalt [FILL]	1	1	MACROCORE	16/60	NA	0.0	
	R2 (0-48") Brown to gray to tan to black medium SAND, trace brick, trace fine gravel, brick, slag [FILL]	6	2	MACROCORE	48/60	NA	0.0	
	R3 (0-20") Gray to brown medium SAND, trace fine gravel, brick, asphalt [FILL]	11	3	MACROCORE	18/18	NA	0.0	
		12					0.0	End of Boring at 11.5' (refusal) Backfilled with cuttings/clean sand to surface grade. Step out boring RB09a advanced ~5' east

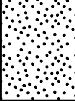
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/2/19		Date Finished 1/2/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 32 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 6		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 18.5		Completion NA	24 HR. 19.4
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BLU/in	PID Reading (ppm)	
	6-inch concrete slab	0						
	R1 (0-30") Brown medium SAND, trace silt, trace fine gravel, asphalt (dry) [FILL]	1	1	MACROCORE	30/60	NA	0.0	Step-out ~5' east of RB09
	R2a (0-18") Light brown fine SAND (dry) [FILL]	2	2	MACROCORE	30/60	NA	0.0	Sampled RB09_0-2 at 13:40
	R2b (18-30") Black to gray medium SAND, some fine gravel, brick, concrete (dry) [FILL]	3	3	MACROCORE	34/60	NA	0.0	
	R3 (0-34") Brown medium SAND, trace silt, fine gravel, brick, coal, ash (moist) [FILL]	4	4	MACROCORE			0.0	

Project		Project No.						
Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		170487001						
Location		Elevation and Datum						
Bronx, NY		NA						
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
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		16					3.7	
		17					4.1	
		18					20.7	
	R4b (28-48") Black fine SAND, fine gravel, brick, coal, wood (moist) [FILL]	19	686.4					
		20	106.1					
		21	159.3					
		22						
		23						
	R5 (0-12") Black, fine SAND, trace medium sand, some fine gravel, brick, ceramic tile (wet) [FILL]	24	39.4					
		25	77.6					
		26	140.8					
		27						
		28						
	R6 (0-20") Black fine SAND, trace medium sand, some fine gravel, brick, glass (wet) [FILL]	29	51.4					
	30	56.2						
	31	208						
R7a (0-8") Gray fine SAND (wet)	32	12.1						
	33	5.0						
	34	3.4						
	35	1.4						
	36	1.4						
	37	0.9						
	38	2.3						
	39	1.7						

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R7b (8-54") Reddish brown fine SAND (wet)	34	7		54/60		2.4
		35					2.9
		36					2.2
		37					
		38					
		39					
		40					
		41					
		42					
		43					
		44					
		45					
		46					
		47					
		48					
		49					
		50					
		51					
		52					
		52.5					

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
		15					
	R4a (0-6") Brown medium SAND, trace silt, trace fine gravel, coal (wet) [FILL]	16					
	R4b (6-48") Black to brown medium SAND, some fine sand, trace silt (wet)	17	4	MACROCORE	48/60	NA	2.3
		18					33.6
		19					740
		20					661
		21					1321
		22					534
		23					931
	R5 (0-48") Black to brown medium SAND (wet)	24	5	MACROCORE	48/60	NA	511
		25					1052
		26					1258
		27					208
		28					40.0
		29					16.4
		30					28.6
		31					32.1
		32					302
		33					704
	R6 (0-30") Brown medium SAND, trace fine gravel (wet)	34	6	MACROCORE	50/60	NA	741
		35					30.7
		36					22.2
		37					12.2
		38					4.1
		39					5.6
		40					0.0

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Petroleum like odors

Sampled RB11_19-21 at 10:35

Petroleum like odors and staining

Petroleum like odors and staining
Sampled RB11_28-30 at 10:40

End of boring at 30' bgs.
MW11 installed at 28', 20-slot screen 13' to 28'

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/26/18		Date Finished 12/26/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 13		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Veronica Zuluaga			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	4-inch concrete slab	0						
	R1 (0-20") Brown, medium SAND, some fine gravel, brick, concrete, coal (dry) [FILL]	1	1	MACROCORE	20/60	NA	3.2	Background PID level: 1.8 ppm Sampled RB12_0-2 at 11:55
		2					1.4	
		3					0.9	
	R2a (0-4") Brown, fine SAND, some silt, brick, coal (dry) [FILL] R2b (4-14") Gray, fine SAND, coal slag, (dry) [FILL]	4	2	MACROCORE	30/60	NA	2.6	Sampled RB12_8-9 at 12:00 Petroleum-like odors
		5					3.7	
		6					6.8	
	R2c (14-30") Brown, fine SAND, some fine gravel (moist) [FILL]	7					180.4	Sampled RB12_9-10 at 12:05
		8					2.0	
		9					0.6	Sampled RB12_10-12 at 12:10
		10						
		11						
	R3 (0-30") Brown, fine SAND, trace silt, brick, metal (wet) [FILL]	12	3	MACROCORE	30/60	NA	0.6	
		13					0.6	
		14					0.5	
		15						

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Log of Boring



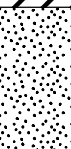


RB12

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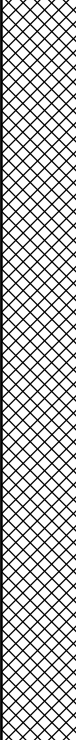
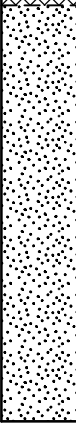
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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4a (0-4") Gray, fine SAND, trace silt (moist)	15	4	MACROCORE	54/60	NA	
	R4b (4-14") Gray, silty CLAY (moist)	16					
	R4c (14-36") Gray, silty fine SAND (moist)	17					
		18					
	R4d (36-54") Gray, silty CLAY, (moist)	19					
		20					End of boring at 20' bgs. Backfilled with cuttings/clean sand to surface grade.
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/7/19		Date Finished 1/7/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 35 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 7	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 24		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	12-inch concrete slab	0						
	R1 (0-28") Brown to tan fine SAND, brick, timber, fine gravel (moist) [FILL]	1	1	MACROCORE	28/60	NA	0.1 0.1 0.8 0.3 0.4	Sampled RB13_0-2 at 10:45
	R2 (0-28") Brown fine SAND, brick (moist) [FILL]	2	2	MACROCORE	28/60	NA	0.3 0.5 1.9 20.2	
	R3a (0-26") Brown fine SAND, trace fine gravel (moist)	3	3	MACROCORE	32/60	NA	1.4 1.2 1.7 26.2 117	Petroleum like odors
	R3b (26-32") Black fine SAND, trace medium sand. fine gravel (moist)	15						

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 No Recovery	15 16 17 18 19	4	MACROCORE	0/60	NA	
	R5 (0-12") Brown to gray fine SAND, trace medium sand (moist-wet)	20 21 22 23 24 25	5	MACROCORE	12/60	NA	67.5 385.1 Petroleum like odors
	R6 (0-40") Brown fine SAND (wet)	26 27 28 29	6	MACROCORE	40/60	NA	38.7 17.1 8.9 12.0 14.1 20.3 17.7 Petroleum like odors
	R7 (0-60") Brown fine SAND (wet)	30 31 32 33	7	MACROCORE	60/60	NA	6.2 3.3 1.7 2.0 2.3 Sampled RB13_33-35 at 10:55

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Log of Boring

RB13

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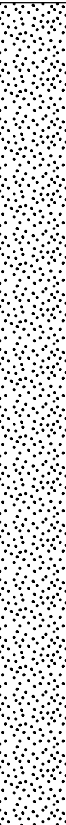
Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
[Patterned Box]		34	7		60/60		1.4
		35					0.7
		35					1.0
		36					
		37					
		38					
		39					
		40					
		41					
		42					
		43					
		44					
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		48					
		49					
		50					
		51					
		52					
		52.5					

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/7/19		Date Finished 1/7/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 5	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 19		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	12-inch concrete slab	0						
	R1 (0-14") Brown fine SAND, brick, concrete (dry) [FILL]	1				8.8		
		2	1	MACROCORE	14/60	0.1		
		3				0.0		
		4						
		5						
	R2 (0-14") Brown fine SAND (moist) [FILL]	6	2	MACROCORE	14/60			
		7						
		8						
		9				0.0		
		10				0.0		
	R3 (0-24") Brown fine SAND, trace medium sand, trace fine gravel (moist)	11						
		12	3	MACROCORE	24/60			
		13				0.5		
		14				0.4		
		15				0.3		

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4a (0-18") Brown fine SAND, trace medium sand, trace fine gravel (moist)	15 16 17	4	MACROCORE	36/60	NA	1.1
	R4b (18-36") Brown to gray fine SAND, peat (moist-wet)	18 19 20					2.4 17.1 48.3
	R5 (0-32") Gray to brown fine SAND (moist)	20 21 22 23 24 25	5	MACROCORE	32/60	NA	148 831 75.7
		25 26 27 28 29 30 31 32 33					973 1006 838 73.7 35.1

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Sampled RB13_18-20 at 11:00
 Petroleum like odors and staining

 Petroleum like odors and staining
 Sampled RB13_23-25 at 10:50

 End of boring at 25' bgs.
 Backfilled with cuttings/clean sand to surface grade.

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/7/19		Date Finished 1/7/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 35 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 7	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 17.5		Completion NA	24 HR. 19
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	12-inch concrete slab	0						
	R1 (0-28") Brown fine SAND, fine gravel (dry) [FILL]	1	1	MACROCORE	28/60	NA	0.0	Sampled RB14_0-2 at 12:20
		2					0.0	
		3					0.0	
		4					0.0	
		5					0.0	
		6					0.0	
		7	2	MACROCORE	28/60	NA	0.3	
	R2 (0-28") Brown fine SAND, fine gravel (dry) [FILL]	8					0.2	
		9					0.4	
		10					0.3	
		11					0.4	
		12					0.4	
		13	3	MACROCORE	22/60	NA	9.9	
	R3a (0-14") Brown to gray fine SAND, trace medium sand, slag, ash, fine gravel (moist) [FILL]	14					13.2	
		15					8.8	
	R3b (14-22") Brown fine SAND (moist)	16					10.0	
		17					24	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
I:\LANGAN.COM\DATA\NYC\DATA0170487001\ENGINEERING DATA\ENVIRONMENTAL\REMEDIATION\BORING LOGS\GFJ...7/24/2019 7:48:25 PM ... Report: Log - LANGAN	R4 (0-32") Brown to gray fine SAND, trace fine gravel (moist-wet)	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	4	MACROCORE	32/60	NA	105.1 74.4 88.0 26.3 56.1	Petroleum-like odors and staining
	R5 (0-38") Brown to gray fine SAND (wet)		5	MACROCORE	38/60	NA	505 572 428.1 120.2 129.4 74.4	Petroleum-like odors and staining
	R6 (0-36") Brown to gray fine SAND, trace fine gravel (wet)		6	MACROCORE	36/60	NA	626 384 72.3 8.9 4.5 4.5	Petroleum-like odors and staining
	R7 (0-52") Brown to white fine SAND, trace medium sand (wet)		7	MACROCORE	52/60	NA	28.7 7.1 8.2 7.3 3.8 2.1	Petroleum-like odor

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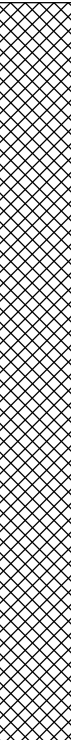
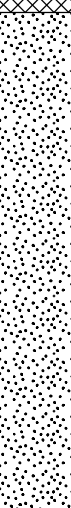
Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001						
Location Bronx, NY		Elevation and Datum NA						
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
●●●●●		34	7		52/60		1.9	End of boring 35' bgs. MW14 installed at 27', 20-slot screen 17' to 27'
		35					0.9	
		35					0.9	
		36						
		37						
		38						
		39						
		40						
		41						
		42						
		43						
		44						
		45						
		46						
		47						
		48						
		49						
		50						
		51						
		52						
		52.5						

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/8/19		Date Finished 1/8/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 30 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 6		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 23		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BLU/in	
	12-inch concrete slab	0					
	R1 (0-25") Brown to tan fine SAND, trace medium sand, fine gravel, slag (dry) [FILL]	1	1	MACROCORE	25/60	NA	0.4
		2					0.7
		3					0.6
		4					0.4
	R2 (0-28") Brown fine SAND, fine gravel (moist) [FILL]	5	2	MACROCORE	28/60	NA	
		6					0.5
		7					0.6
		8					0.6
		9					0.6
		10					0.4
	R3 (0-34") Brown fine SAND, brick, coal ash, coal, fine gravel (moist) [FILL]	11	3	MACROCORE	34/60	NA	
		12					0.6
		13					0.8
		14					0.7
		15					1.6


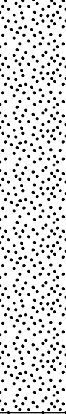
Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
	R4a (0-24") Brown fine SAND, brick, fine gravel (moist) [FILL]	15	4	MACROCORE	30/60	NA	1.7	
		16					1.3	
		17					1.4	
		18					2.7	
		R4b (24-30") Black to gray fine SAND, fine gravel (moist) [FILL]	19	5	MACROCORE	24/60	NA	6.0
		20	11.2					
		21	375					
		22	1101					
		R5a (0-12") Black to gray fine SAND, fine gravel (wet) [FILL]	23	6	MACROCORE	34/60	NA	563
			24					102
			25					18.8
			26					19.1
		27	9.9					
		28	6.1					
	R5b (12-24") Gray to brown fine SAND (wet)	29					3.4	
		30					3.3	
		31					5.6	
		32						
		33						
	R6 (0-34") Brown fine SAND (wet)							

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/8/19		Date Finished 1/8/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 5	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 17		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	12-inch concrete slab	0						
	R1 (0-29") Brown fine SAND, concrete, fine gravel, wood ash (moist) [FILL]	1	1	MACROCORE	29/60	NA	0.3 1.1	Background PID 0.4
	R2 (0-28") Brown to tan fine SAND (moist) [FILL]	2	2	MACROCORE	28/60	NA	0.5 0.4	Sampled RB16_0-2 at 10:40
		3	3	MACROCORE	30/60	NA	0.5	
	R3a (0-8") Brown to tan fine SAND (moist) [FILL]	4						
		5						
		6						
		7						
	R3b (8-30") Black to dark brown fine SAND, trace medium sand, fine gravel, coal ash, ceramic tile (moist) [FILL]	8					0.3 0.3	
		9					0.3 0.3	
		10					0.4	
		11						
		12						Sampled RB16_13-15 at 10:45
		13					0.3 0.3	
		14					0.8	
		15					0.4 0.3	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-32") Brown to black to reddish brown fine SAND, trace medium sand, fine gravel, coal ash, slag, ceramic tile (moist-wet) [FILL]	15	4	MACROCORE	32/60	NA	
		16					
		17					
		18					0.4
		19					0.3
		20					0.4
		21					0.4
	R5 (0-18") Brown to gray fine SAND, trace fine gravel (wet)	22	5	MACROCORE	18/60	NA	
		23					
		24					0.4
		25					0.4
		26					0.4
		27					0.4
		28					0.3
		29					
		30					
		31					
		32					
		33					

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Sampled RB16_18-20 at 10:50

End of boring at 25' bgs. MW16 installed at 27', 20-slot screen 17' to 27'

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/4/19		Date Finished 1/4/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 5	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 22		Completion NA	24 HR. 20.1
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	2-inch concrete slab	0						
	R1 (0-40") Brown to gray fine SAND, trace medium sand, trace silt, slag, concrete, brick (dry) [FILL]	1	1	MACROCORE	40/60	NA	0.0	Sampled RB17_0-2 at 13:30
		2					0.0	
		3					0.0	
		4					0.0	
		5					0.0	
	R2 (0-36") Gray to black fine SAND, trace medium sand, slag, concrete, glass (dry) [FILL]	6	2	MACROCORE	36/60	NA	0.0	Sampled RB17_4-6 at 13:40
		7					0.0	
		8					0.0	
		9					0.0	
		10					0.0	
	R3 (0-36") Brown fine SAND (moist)	11	3	MACROCORE	36/60	NA	0.0	Sampled RB17_8-10 at 13:35
		12					0.0	
		13					0.0	
		14					0.0	
		15					0.0	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
[Dotted Pattern]	R4a (0-14") Brown fine SAND, trace fine gravel (moist)	15 16 17	4	MACROCORE	38/60	NA	0.0
[Diagonal Lines]	R4b (14-38") Gray silty CLAY (moist)	18 19 20					0.0 0.0 0.0
[Dotted Pattern]	R5a (0-8") Brown to gray fine SAND, trace medium sand, some fine gravel (wet)	20 21 22	5	MACROCORE	38/60	NA	0.0
[Diagonal Lines]	R5b (8-30") Gray silty CLAY (wet)	23 24					0.0 0.0
[Dotted Pattern]	R5c (30-38") Gray fine SAND (moist)	25 26 27 28 29 30 31 32 33					0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

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Sampled RB17_18-20 at 13:45

End of boring at 25' bgs.
MW17 installed at 28', 20-slot screen 18' to 28'

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/4/19		Date Finished 1/4/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 19		Completion NA	24 HR. 19.8
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	8-inch concrete slab	0						
	R1 (0-26") Brown fine SAND, trace silt, fine gravel, brick, plastic, slag (dry) [FILL]	1	1	MACROCORE	26/60	NA	0.1	Solvent like odor Sampled RB18_0-2 at 9:00
		2					9.3	
		3					12.7	
		4					8.9	
		5					3.5	
	R2a (0-16") Brown to tan, fine SAND, brick, slag, concrete (dry-moist) [FILL]	6	2	MACROCORE	48/60	NA	3.6	Solvent like odor
		7					15.9	
		8					21.6	
		9					4.4	
		10					2.2	
	R2b (16-48") Brown fine SAND, trace fine gravel (moist)	11	3	MACROCORE	36/60	NA	0.6	Sampled RB18_6-8 at 9:05
		12					0.8	
		13					1.4	
		14					2.5	
		15					1.9	

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Log of Boring **RB18/RMW18**

Sheet 2 of 2

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-36") Brown to gray fine SAND, trace fine gravel (moist)	15	4	MACROCORE	36/60	NA	0.0
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
28							
29							
30							
31							
32							
33							

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/19		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 5	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 19.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon			
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA				

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MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	8-inch concrete slab	0						
	R1 (0-26") Brown fine SAND, trace silt, concrete, coal (moist) [FILL]	1	1	MACROCORE	26/60	NA	0.0	Sampled RB19_0-2 at 14:00
		2					0.0	
		3					0.0	
	R2 (0-40") Tan to brown fine SAND, trace fine gravel (moist)	5	2	MACROCORE	40/60	NA	0.0	
		6					0.0	
		7					0.0	
		8					0.0	
		9					0.0	
		10					0.0	
	R3 (0-30") Brown to gray fine SAND, trace fine gravel (moist)	10	3	MACROCORE	30/60		0.0	
		11					0.0	
		12					0.0	
		13					0.0	
		14					0.0	
		15					0.0	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-36") Brown to gray fine SAND, some fine gravel (moist-wet)	15	4	MACROCORE	36/60	NA	0.0
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
	R5a (0-38") Gray to black clayey SILT (wet)	25	5	MACROCORE	40/60	NA	8.8
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					
		34					
	R5b (38-40") Gray fine SAND (wet)	35					25.6
		36					

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Sampled RB19_20-22 at 14:05

Sampled RB19_24-25 at 14:10

End of boring at 25' bgs. Backfilled with cuttings/clean sand to surface grade.

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/4/19		Date Finished 1/4/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 18		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon			
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA				

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	2-inch concrete slab	0						
	R1 (0-24") Brown to gray medium SAND, fine gravel, coal (dry) [FILL]	1	1	MACROCORE	24/60	NA	0.0	Sampled RB20_0-2 at 9:45
		2					0.0	
		3					0.0	
		4					0.0	
	R2 (0-32") Dark brown to red fine SAND, concrete, coal (dry) [FILL]	5	2	MACROCORE	32/60	NA	0.0	Sampled RB20_7-9 at 9:50
		6					0.0	
		7					0.0	
		8					0.0	
		9					0.0	
		10					0.0	
	R3a (0-34") Dark brown to red fine SAND, concrete (moist) [FILL]	11	3	MACROCORE	36/60	NA	3.0	Sampled RB20_13-15 at 9:55
		12					0.0	
		13					0.0	
		14					2.2	
		15					0.0	
		16					0.0	

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Log of Boring

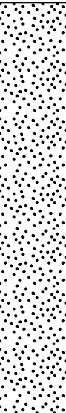
RB20

Sheet

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R3b (34-36") Brown fine SAND, trace fine gravel (moist)	15	4	MACROCORE	40/60	NA	0.0
	R4 (0-40") Brown fine SAND, trace fine gravel (moist-wet)	16					
		17					
		18					0.0
		19					0.0
		20					0.0
		21					0.0
		22					0.0
		23					0.0
		24					0.0
		25					0.0
		26					0.0
		27					0.0
		28					0.0
		29					0.0
		30					0.0
		31					0.0
		32					0.0
		33					0.0

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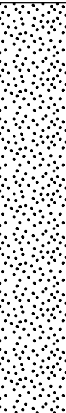
Sampled RB20_18-20 at 10:00

End of boring at 20' bgs. Backfilled with cuttings/clean sand to surface grade.

Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/19		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon			
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA				

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	8-inch concrete slab	0						
	R1a (0-30") Brown to tan to gray fine SAND, brick, fine gravel, coal ash (dry) [FILL]	1	1	MACROCORE	36/60	NA	0.0	Step-out ~5' west of RB21
	R1b (30-36") Brown fine SAND, trace fine gravel (moist)	3					0.0	Sampled RB21_0-2 at 11:30
		4					0.3	
		5					0.0	Sampled RB21_2-4 at 11:35
		6						
	R2 (0-32") Brown to gray fine SAND, trace fine gravel (moist)	7	2	MACROCORE	32/60	NA	0.0	
		8					0.0	
		9					0.0	
		10					0.0	
		11					0.0	
	R3 (0-42") Brown to gray fine SAND, trace fine gravel (moist)	12	3	MACROCORE	42/60	NA	0.0	
		13					0.0	
		14					0.0	
		15					0.0	

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-30") Brown to gray fine SAND, some fine gravel (moist)	15	4	MACROCORE	30/60	NA	0.0
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
28							
29							
30							
31							
32							
33							
<p>Sampled RB21_18-20 at 11:40</p> <p>End of boring at 20' bgs. Backfilled with cuttings/clean sand to surface grade.</p>							

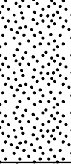
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/19		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 17 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	8-inch concrete slab	0						
	R1 (0-34") Brown to black to tan fine SAND, fine gravel, brick, coal, slag (dry) [FILL]	1	1	MACROCORE	34/60	NA	0.0	
		2					0.0	
		3					0.0	
	R2 (0-22") Brown fine SAND, trace silt, trace fine gravel (dry)	4					0.0	
		5					0.0	
		6					0.0	
	R3 (0-50") Brown to gray fine SAND. trace fine sand, trace fine gravel (dry)	7	2	MACROCORE	22/60	NA	0.0	
		8					0.0	
		9					0.0	
		10					0.0	
		11					0.0	
		12					0.0	
		13	3	MACROCORE	50/60	NA	0.0	
		14					0.0	
		15					0.0	

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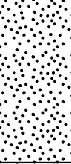
Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-20") Brown medium SAND, trace silt, some fine gravel (moist)	15	4	MACROCORE	20/24	NA	0.0
		16					0.0
		17					0.0
		18					0.0
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					
							End of Boring at 17' (refusal) Backfilled with cuttings/clean sand to surface grade. Step out boring RB21a advanced ~5' west

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/19		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 3	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	8-inch concrete slab	0						
	R1 (0-26") Brown to tan to gray fine SAND, trace medium sand, wood ash (dry) [FILL]	1					0.0	Sampled RB22_0-2 at 13:00
		2				0.0		
		3	1	MACROCORE	26/60	NA	0.3	
	R2 (0-44") Brown to gray to tan medium sand, trace fine gravel (moist)	4					0.0	Sampled RB22_3-5 at 13:05
		5					0.0	
		6	2	MACROCORE	44/60	NA	0.0	
		7					0.0	
		8					0.0	
		9					0.0	
	R3 (0-18") Brown fine SAND, some fine gravel (moist)	10					0.0	
		11					0.0	
		12	3	MACROCORE	18/60	NA	0.0	
		13					0.0	
		14					0.0	
		15					0.0	

Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-12") Brown to gray fine SAND, some fine gravel (moist)	15	4	MACROCORE	12/60	NA	0.0
		16					
		17					0.0
		18					End of Boring at 17' (refusal) Backfilled with cuttings/clean sand to surface grade. Step out boring RB22a advanced ~5' west
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/10		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 2		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 21		Completion NA	24 HR. 20.1
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	Did not collect soil from 0-15', see RB22 soil boring log for soil classification	0						
		1						Step-out ~5' west of RB22
		2						
		3						
		4						
		5						
		6						
		7						
		8						
		9						
		10						
		11						
		12						
		13						
		14						
		15						

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Log of Boring **RB22a/RMW22**

Sheet 2 of 2

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R1 (0-12") gray to brown fine SAND, some fine gravel (moist)	15 16 17 18 19	1	MACROCORE	12/60	NA	
	R2 (0-40") Brown to black fine SAND, some fine gravel (wet)	20 21 22 23	2	MACROCORE	48/60	NA	Sampled RB22_20-22 at 11:30
	R3b (40-48") Gray to black silty CLAY, trace fine sand (wet)	24					
		25 26 27 28 29 30 31 32 33					End of boring at 25' bgs. RMW22 installed at 27', 20-slot screen 17' to 27'

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/10/19		Date Finished 7/10/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 3	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 15		Completion NA	Core 24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	3-inch concrete slab	0						
	R1 (0-18") brown to black medium SAND, trace fine gravel, glass, brick (dry) [FILL]	1	R1	MACROCORE	18/48	NA	0.0	Sampled RB23_0-2 at 13:55
		2					0.0	
		3					0.0	
	R2 (0-14") reddish-brown fine gravelly fine SAND (dry)	4	R2	MACROCORE	14/48	NA		
		5					0.0	
		6					0.0	
	R3 (0-30") reddish-brown fine gravelly fine SAND (dry)	8	R3	MACROCORE	30/48	NA		Sampled RB23_10-12 at 14:0
		9					0.0	
		10					0.0	
	R4a (0-30") gray fine gravelly, fine SAND (dry)	12	R4	MACROCORE	38/48	NA		Sampled RB23_13-15 at 14:10
		13					0.0	
		14					0.0	
	R4b (30-38") reddish-brown fine SAND, trace fine gravel (wet)	15					0.0	

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Log of Boring

RB23/RMW23

Sheet

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
[Pattern]		15	R4		38/48		0.0	End of boring at 16' bgs. MW23 installed at 19', 20-slot screen 9' to 19'
		16					0.0	
		17						
		18						
		19						
		20						
		21						
		22						
		23						
		24						
		25						
		26						
		27						
		28						
		29						
		30						
		31						
		32						
		33						

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Log of Boring


RB24

Sheet

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001				
Location Bronx, NY		Elevation and Datum NA				
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data			Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	PID Reading (ppm)	
		15	R4	44/48	0.0	End of boring at 16' bgs. Backfilled with cuttings/clean sand to surface grade and patched borehole with concrete.
		16			0.0	
		17			0.0	
		18				
		19				
		20				
		21				
		22				
		23				
		24				
		25				
		26				
		27				
		28				
		29				
	30					
	31					
	32					
	33					

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/11/19		Date Finished 7/11/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 3		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 12.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	3-inch concrete slab	0						
	R1 (0-24") dark brown to black medium SAND, trace medium gravel, glass, brick (dry) [FILL]	1	R1	MACROCORE	24/48	NA	0.0	Sampled RB25_0-2 at 11:10
		2					0.0	
		3					0.0	
		4					0.0	
	R2 (0-32") reddish-brown fine SAND, trace fine gravel (dry)	5	R2	MACROCORE	32/48	NA	0.0	Sampled RB25_9-11 at 11:20
		6					0.0	
		7					0.0	
		8					0.0	
	R3 (0-32") reddish-brown fine SAND, some silt (moist)	9	R3	MACROCORE	32/48	NA	0.0	Sampled RB25_11-13 at 11:30
		10					0.0	
		11					0.0	
		12					0.0	
	R4 (0-48") brown to reddish-brown silty fine SAND (wet)	13	R4	MACROCORE	48/48	NA	0.0	
		14					0.0	
		15					0.0	

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Log of Boring


RB25/RMW25

Sheet

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
		15	R4		48/48		0.0	chemical-like odor
		16					0.0	End of boring at 16' bgs. RMW25 installed at 20', 20-slot screen 10' to 20'
		17					0.0	
		18						
		19						
		20						
		21						
		22						
		23						
		24						
		25						
		26						
		27						
	28							
	29							
	30							
	31							
	32							
	33							

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/10/19		Date Finished 7/10/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 3	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 15		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

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MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	3-inch concrete slab	0						
	R1 (0-20") dark brown to black medium SAND, trace medium gravel, ash, coal, brick (dry) [FILL]	1	R1	MACROCORE	26/48	NA	0.0	Sampled RB26_0-2 at 12:45
		2					0.0	
		3					0.0	
		4					0.0	
	R2a (0-10") black medium SAND, trace fine gravel, ash, coal, brick (dry) [FILL]	5	R2	MACROCORE	30/48	NA	0.0	Sampled RB26_10-12 at 13:00
	R2b (10-30") reddish-brown fine SAND, trace fine gravel (dry)	6					0.0	
		7					0.0	
		8					0.0	
	R3 (0-30") reddish-brown fine gravelly, fine SAND (dry)	9	R3	MACROCORE	30/48	NA	0.0	Sampled RB26_10-12 at 13:00
		10					0.0	
		11					0.0	
		12					0.0	
	R4 (0-48") soft grey CLAY	13	R4	MACROCORE	48/48	NA	0.0	
		14					0.0	
		15					0.0	

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Log of Boring

RB26

Sheet

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2

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/ft		PID Reading (ppm)
		15	R4		48/48		0.0	Sampled RB26_14-16 at 13:05
		16					0.0	End of boring at 16' bgs. Backfilled with cuttings/clean sand to surface grade and patched borehole with concrete.
		17					0.0	
		18						
		19						
		20						
		21						
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/11/19		Date Finished 7/11/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 3	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 12		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	3-inch concrete slab	0						
	R1 (0-12") brown to black medium SAND, trace fine gravel, slag, coal, brick, glass (dry) [FILL]	1	R1	MACROCORE	12/48	NA	0.0	collected RB27_0-2 at 12:35
		2					0.0	
	R2 (0-20") reddish-brown to black fine SAND, trace fine gravel, trace silt (dry) [FILL]	4	R2	MACROCORE	20/48	NA	0.0	
		5					0.0	
		6					0.0	
	R3 (0-32") reddish-brown silty SAND (moist)	8	R3	MACROCORE	32/48	NA	0.0	collected RB27_9-11 at 12:45
		9					0.0	
		10					0.0	
		11					0.0	
	R4 (0-48") reddish-brown silty SAND (wet)	12	R4	MACROCORE	48/48	NA	0.0	collected RB27_11-13 at 12:50
		13					0.0	
		14					0.0	
		15					0.0	

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Log of Boring


RB27

Sheet

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of

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001						
Location Bronx, NY		Elevation and Datum NA						
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/ft		PID Reading (ppm)
		15					0.0	End of boring at 16' bgs. Backfilled with cuttings/clean sand to surface grade and patched borehole with concrete.
		16	R4		48/48		0.0	
		17					0.0	
		18						
		19						
		20						
		21						
		22						
		23						
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/11/19		Date Finished 7/11/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 3		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 14.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
[Cross-hatched pattern]	3-inch concrete	0						
	R1 (0-22") brown to black medium SAND, trace medium gravel, coal, brick, wood, concrete (dry) [FILL]	1				0.0	collected RB28_0-2 at 13:55	
		2	R1	MACROCORE	22/48	NA		14.9
		3						16.3
4					0.0			
[Dotted pattern]	R2 (0-30") reddish-brown silty SAND (dry)	5				0.0	collected RB28_6-8 at 14:00 collected SODUP06_071119	
		6	R2	MACROCORE	30/48	NA		3.2
		7						0.0
		8						0.0
[Dotted pattern]	R3 (0-24") brown to grey fine SAND, some medium gravel (dry) (decomposed rock)	9				0.0		
		10	R3	MACROCORE	24/48	NA		0.0
		11						0.0
		12						0.0
[Dotted pattern]	R4 (0-24") grey to black gravelly fine SAND (wet)	13				0.0		
		14	R4	MACROCORE	24/48	NA	0.0	
		15					1.2	

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Log of Boring


RB28

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001						
Location Bronx, NY		Elevation and Datum NA						
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
		15	R4		24/48		1.3	collected RB28_14-16 at 14:15
		16					0.0	End of boring at 16' bgs. Backfilled with cuttings/clean sand to surface grade and patched borehole with concrete.
		17					0.0	
		18						
		19						
		20						
		21						
		22						
		23						
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	32							
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APPENDIX C

MONITORING WELL CONSTRUCTION LOGS

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW01

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 13.86 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		12/27/2018	12/27/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 20 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 5 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	13.66	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	12.66	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	10.66	3	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	8.7	5.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-6.34	20	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.52	1/17/2019	11.14 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.82	7/26/2019	10.84 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW03

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 14.2 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		12/26/2018	12/26/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 25 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 10 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	13.48	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	12.48	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	5.48	8	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	3.5	10.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-11.52	25	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.14	1/17/2019	11.34 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.54	7/26/2019	10.94 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW04

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 13.97 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		12/21/2018	12/21/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 24 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 9 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	13.74	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	12.74	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	6.74	7	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	4.7	9.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-10.26	24	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2	1/17/2019	11.74 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.33	7/26/2019	11.41 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well's vertical structure. At the top is the casing. Below it is a riser pipe. A seal is located at the top of the riser. Below the seal is a screen section, which is part of the PVC casing. The annulus around the screen is filled with No. 2 Sand. The bottom of the well is at a depth of 24 feet.</p>			
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW05

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 14.26 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		12/21/2018	12/21/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 23 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 8 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	14.04	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	13.04	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	8.04	6	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	6.0	8.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-8.96	23	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
1.83	1/17/2019	12.21 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.44	7/26/2019	11.6 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW07

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 14.53 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		12/20/2018	12/20/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Nick Turro	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 24 feet bgs, insert 20 feet of 0.02-inch slotted PVC screen and 4 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	14.34	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	13.34	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	12.34	2	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	10.3	4.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-9.66	24	
SCREEN LENGTH		20'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
1.93	1/17/2019	12.41 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.26	7/26/2019	12.08 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well's vertical profile. From top to bottom: a solid PVC riser (4 feet long), a bentonite seal (1 foot thick), a PVC casing (20 feet long), a PVC screen (20 feet long, 0.020 inch slots), and a No. 2 Sand backfill (2 feet thick) above the screen. The casing is 3.75 inches in diameter. The well is shown in a cross-section view.</p>			
<p>LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York</p>			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW09

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 21.93 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/2/2019	1/2/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 28 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 13 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.67	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.67	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	10.67	11	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	8.7	13.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-6.33	28	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.23	1/17/2019	19.44 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well construction from the ground surface down to 28 feet. It shows a solid PVC riser extending from the surface to a bentonite seal at 1 foot depth. Below the seal is a 15-foot section of PVC casing with a No. 20 slot screen. The annulus between the casing and the borehole is filled with No. 2 sand. The bottom of the casing is at 13 feet depth, and the bottom of the borehole is at 28 feet depth.</p>			
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW10

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 21.89 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/8/2019	1/8/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 28 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 18 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.5	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.5	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	5.5	16	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	3.5	18.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-6.5	28	
SCREEN LENGTH		10'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.34	1/17/2019	19.16 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.88	7/26/2019	18.62 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well's vertical profile. At the top (0 ft depth), there is a casing. Below it is a riser pipe. A seal is located at a depth of 1 foot. Below the seal is a filter section, followed by a screen starting at 18.0 feet depth and extending to 28.0 feet. The annulus between the casing and the screen is filled with No. 2 Sand. The bottom of the boring is at a depth of 28 feet.</p>			
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW11

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 22.01 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/2/2019	1/2/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.61	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.61	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	10.61	11	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	8.6	13.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-6.39	28	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.35	1/17/2019	19.26 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.93	7/26/2019	18.68 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well's vertical structure. At the top is the casing. Below it is a riser pipe. A seal is located at the top of the riser. Below the seal is a screen section, which is part of the PVC casing. The screen is surrounded by No. 2 Sand backfill. The bottom of the well is at a depth of 28 feet.</p>			
<p align="center">LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York</p>			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW14

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 21.93 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/7/2019	1/7/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.36	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.36	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	15
	6.36	15	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	17.00
	4.4	17.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	27.00
	-5.64	27	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.33	1/17/2019	19.03 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.93	7/26/2019	18.43 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

The diagram illustrates the well's vertical structure. At the top (0 ft depth), there is a riser pipe. Below the riser, at a depth of 1 ft, is a seal. The main casing is made of PVC. At 15 ft depth, there is a screen section. Below the screen, the annulus is filled with No. 2 Sand. The total depth of the boring is 27 ft. The diagram also shows the groundwater table at approximately 19 ft depth.

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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW16

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 21.85 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/8/2019	1/8/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.25	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.25	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	15
	6.25	15	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	17.00
	4.3	17.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	27.00
	-5.75	27	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.36	1/17/2019	18.89 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.96	7/26/2019	18.29 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

The diagram illustrates the well's vertical structure. At the top (0 ft depth), there is a riser pipe. Below the riser, at a depth of 1 ft, is a seal. The main casing is made of PVC. At 15 ft depth, there is a screen section. Below the screen, the annulus is filled with No. 2 Sand. The total depth of the well is 27 ft. The diagram also shows the groundwater level at approximately 18.3 ft depth.

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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW17

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 22.15 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/4/2019	1/4/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 28 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 18 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.96	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.96	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	16
	5.96	16	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	18.00
	4.0	18.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	28.00
	-6.04	28	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
1.87	1/17/2019	20.09 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.93	7/26/2019	19.03 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

The diagram illustrates the well construction details. It shows a vertical cross-section of the well. At the top, there is a casing. Below the casing, a riser is shown extending down to a seal. Below the seal, a screen is shown, which is surrounded by No. 2 Sand backfill. The diagram also indicates the PVC casing and the screen. The well is shown to be 28 feet deep, with the screen extending from 18 feet to 28 feet depth. The seal is located at 1 foot depth. The riser is solid PVC, and the screen is PVC with No. 20 slots. The backfill is No. 2 Sand.

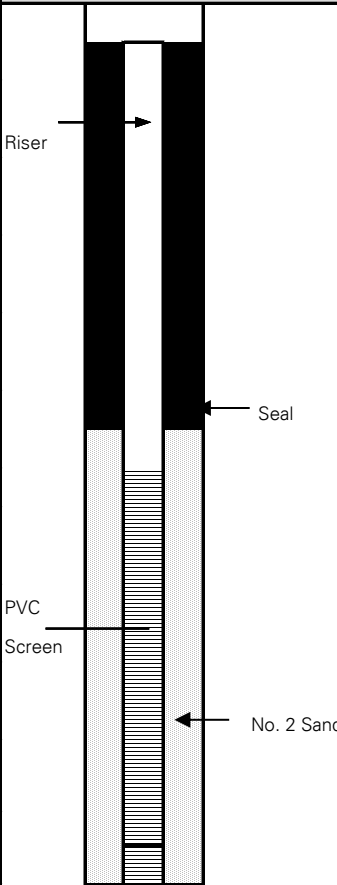
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW18

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 22.25 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/8/2019	1/8/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	22.07	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	21.07	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	15
	7.07	15	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	17.00
	5.1	17.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	27.00
	-4.93	27	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.31	1/17/2019	19.76 ft	
ELEVATION	DATE	DEPTH TO WATER	
3.12	7/26/2019	18.95 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	



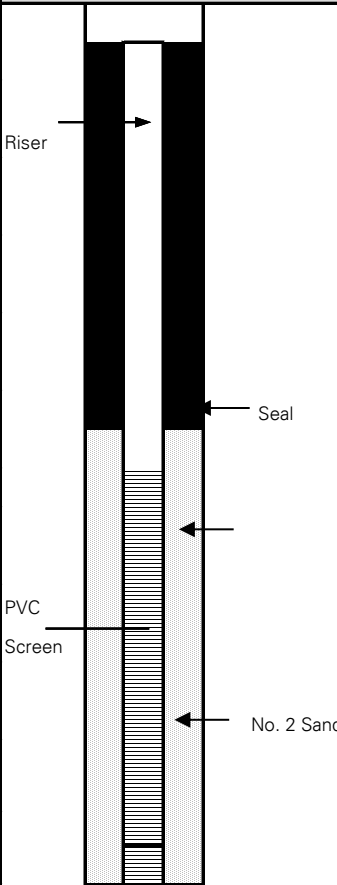
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW22

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 22.44 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/4/2019	1/4/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	22.29	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	21.29	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	15
	7.29	15	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	17.00
	5.3	17.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	27.00
	-4.71	27	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.21	1/17/2019	20.08 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.53	7/26/2019	19.76 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	



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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW23

PROJECT		PROJECT NO.	
404 Exterior Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 15.79 NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services Corp.		7/10/2019	7/10/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7730 DT		Adam Hutchinson	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Patrick Stovall	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2-inches		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	filpro sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Geoprobe 7730 DT was used to advance the boring to approximately 19 feet bgs. A two-inch (2") PVC monitoring well was installed which consisted of 10' of 20 slot (0.020-inch) well screen, and a solid 2" PVC riser. Well screen was installed from approximately 9 to 19 feet bgs with riser from 9 feet bgs to surface. Wells were finished with a flush mounted road box and concrete pad.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Langan	MAX PUMP RATE	1 LPM
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	15 gal
Well developed from 1:30 - 2:00 PM until purged groundwater was no longer turbid.			
TOP OF CASING	ELEVATION	DEPTH (ft)	
	15.79	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	
	8.79	7	
TOP OF FILTER	ELEVATION	DEPTH (ft)	
	7.79	8	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	
	6.8	9.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	
	-3.21	19	
SCREEN LENGTH		10	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.49	7/12/2019	13.3 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.57	7/26/2019	13.22 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
			19
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW25

PROJECT		PROJECT NO.	
404 Exterior Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 15.26 NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services Corp.		7/11/2019	7/11/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7730 DT		Adam Hutchinson	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Patrick Stovall	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	filpro sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Geoprobe 7730 DT was used to advance the boring to approximately 20 feet bgs. A two-inch (2") PVC monitoring well was installed which consisted of 10' of 20 slot (0.020-inch) well screen, and a solid 2" PVC riser. Well screen was installed from approximately 10 to 20 feet bgs with riser from 10 feet bgs to surface. Wells were finished with a flush mounted road box and concrete pad.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Langan	MAX PUMP RATE	1 LPM
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	3 gal
Well developed from 2:00 - 2:30 PM until purged groundwater was no longer turbid.			
TOP OF CASING	ELEVATION	DEPTH (ft)	
	15.26	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	
	7.26	8	
TOP OF FILTER	ELEVATION	DEPTH (ft)	
	6.26	9	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	
	5.3	10.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	
	-4.74	20	
SCREEN LENGTH		10	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
3.05	7/12/2019	12.21 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.98	7/26/2019	12.28 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
			20
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APPENDIX D

GROUNDWATER SAMPLING LOGS

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW01	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW01_011619
Project Number:	170487003	Well Depth:	20'	Pine Number:	21202	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.1	Sample Date:	1/16/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	5-20'	Pine Number:	042076	Pump Intake Depth:	16'		
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	11.08	Sample Time:	10:00

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
8:50	14.87	6.17	-9	5.56	650.0	0.00	11.20		1.2	turbid brown, same sulfuric odor as RMW03	N/A
8:55	16.13	5.82	-65	5.34	266.00	0.00	11.27	0.18	2.1		N/A
9:00	16.11	5.76	-71	5.28	200.00	0.00	11.31	0.1	2.6		N
9:05	16.15	5.55	-84	5.12	120.00	0.00	11.37	0.12	3.2		N
9:10	16.12	5.42	-93	4.99	45.90	0.00	11.39	0.11	3.75		N
9:15	16.19	5.37	-100	4.91	20.10	0.00	11.41	0.13	4.4		N
9:20	16.20	5.35	-105	4.85	92.10	0.00	11.45	0.1	4.9		N
9:25	16.21	5.33	-110	4.80	46.5	0.00	11.50	0.1	5.4		N
9:30	16.20	5.33	-114	4.79	23.3	0.00	11.52	0.08	5.8		N
9:35	16.31	5.33	-118	4.75	10.4	0.00	11.55	0.1	6.3		N
9:40	16.26	5.33	-120	4.72	4.4	0.00	11.56	0.08	6.7	N	
9:45	16.21	5.33	-123	4.72	2.4	0.00	11.57	0.08	7.1	N	
9:50	16.22	5.33	-124	4.72	2.0	0.00	11.57	0.1	7.6	Y	

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No.:	RMW03	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW03_011519
Project Number:	170487003	Well Depth:	25'	Pine Number:	21202	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.0	Sample Date:	1/15/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	10-25'	Pine Number:	042076	Pump Intake Depth:	18'		Sample Time:
				Tubing Diameter:		3/8" x 1/2"	Depth to Water Before Purge:		

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
2:18	15.20	5.99	-10	3.92	1000.0	0.00	12.22		2.25		N/A
2:23	15.95	5.98	-50	3.77	933.00	0.00	12.27	0.07	2.6		N/A
2:28	16.55	5.94	-77	3.60	640.00	0.00	12.36	0.08	3		N
2:33	16.85	5.88	-89	3.49	398.00	0.00	12.43	0.08	3.4		N
2:38	16.86	5.83	-100	3.42	255.00	0.00	12.54	0.08	3.8		N
2:43	16.88	5.81	-105	3.40	160.00	0.00	12.57	0.1	4.3		N
2:48	16.85	5.88	-111	3.41	93.90	0.00	12.60	0.1	4.8	black turbid, strong petroleum/ sulfuric odor	N
2:53	17.10	5.76	-116	3.38	75.2	0.00	12.62	0.06	5.1		N
2:58	17.40	5.73	-119	3.37	40.8	0.00	12.63	0.13	5.75		N
3:03	17.36	5.72	-121	3.36	33.4	0.00	12.65	0.1	6.25		N
3:08	17.31	5.71	-124	3.35	23.4	0.00	12.67	0.1	6.75		N
3:13	17.26	5.70	-126	3.34	21.6	0.00	12.68	6.35	7.25		N
3:18	17.24	5.70	-127	3.33	15.9	0.00	12.71	0.1	7.75		N

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit
 11. Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions			Sampling Information			
Project Name:	Gerard + E. 146th	Well No.:	RMW04	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy		Sample(s):	RMW04_011519		
Project Number:	170487003	Well Depth:	24'	Pine Number:	21202	Background PID (ppm):	0.0					
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.0		Sample Date:	1/15/2019		
Sampling Personnel:	T. Goodnough	Well Screen Interval:	9-24'	Pine Number:	042076	Pump Intake Depth:	18'					
						Tubing Diameter:	3/8" x 1/2"		Depth to Water Before Purge:	11.65	Sample Time:	13:00

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?	
												BEGIN PURGING
11:43	14.58	5.57	-58	2.89	1000.0	0.00	12.75		2		N/A	
11:48	15.00	5.58	-75	2.79	1000.00	0.00	12.86	0.1	2.5		N/A	
11:53	14.96	5.60	-80	2.72	1000.00	0.00	12.97	0.05	2.75		N	
11:58	15.12	5.59	-84	2.69	1000.00	0.00	13.05	0.05	3		N	
12:03	15.22	5.59	-87	2.66	1000.00	0.00	13.19	0.06	3.3		Y	
12:08	16.19	5.55	-87	2.57	1000.00	0.31	13.37	0.12	3.9	turbid brown, little odor	N	
12:13	15.96	5.53	-85	2.51	932.00	0.19	13.49	0.08	4.3		N	
12:18	15.70	5.49	-84	2.48	1000.0	0.00	13.58	0.12	4.9		N	
12:23	15.87	5.48	-84	2.44	1000.0	0.00	13.66	0.06	5.2		Y	
12:28	15.80	5.47	-84	2.41	669.0	0.00	13.72	0.12	5.8		N	
12:33	15.99	5.47	-84	2.39	492.0	0.20	13.80	0.1	6.3		N	
12:38	15.94	5.47	-83	2.37	306.0	0.19	13.84	0.06	6.6		N	
12:43	15.91	5.47	-83	2.36	227.0	0.11	13.89	0.06	6.9		N	

- Notes:**
 1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit
 11. Well stabilized; however, continued purging due to turbid water. Sample collected after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW05	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW05_011519
Project Number:	170487003	Well Depth:	21'	Pine Number:	21202	Background PID (ppm):	0.1		
Site Location:	Bronx, NY	Well Diameter:	2'	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.5	Sample Date:	1/15/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	8-23'	Pine Number:	042076	Pump Intake Depth:	18'		
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	12.07	Sample Time:	1100

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
9:38	11.71	6.39	24	1.52	1000.0	0.00	12.13		0.75	turbid brown, sulfuric organic odor	N/A
9:43	16.70	6.39	-61	1.65	1000.00	0.00	12.15	0.11	1.3		N/A
9:48	15.96	6.30	-79	1.61	1000.00	0.00	12.17	0.1	1.8		N
9:53	15.69	6.26	-86	1.61	1000.00	0.00	12.18	0.04	2		N
9:58	14.84	6.20	-92	1.60	1000.00	0.00	12.19		2.2		N
10:03	16.97	6.09	-98	1.62	1000.00	0.00	12.21	0.24	3.4		N
10:08	16.17	6.03	-100	1.64	1000.00	0.00	12.22	0.04	3.6		N
10:13	16.40	6.00	-103	1.64	1000.0	0.00	12.23	0.04	3.8		N
10:18	16.33	5.98	-111	1.60	1000.0	0.00	12.25	0.08	4.2		N
10:23	17.42	5.86	-119	1.55	1000.0	0.00	12.27	0.16	5		N
10:28	17.08	5.92	-127	1.49	1000.0	0.00	12.30	0.1	5.5		N
10:33	16.85	5.87	-138	1.47	1000.0	0.00	12.31	0.1	6		N
10:38	16.89	5.85	-149	1.47	1000.0	0.00	12.31	0.1	6.5		N
											N

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit
 11. Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW07	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW07_011619
Project Number:	170487003	Well Depth:	24'	Pine Number:	21202	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	QED Sample Pro	PID Beneath Inner Cap (ppm):	0.0	Sample Date:	1/16/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	4-24'	Pine Number:	43733	Pump Intake Depth:	19'		Sample Time:
				Tubing Diameter:		1/4" x 3/8"	Depth to Water Before Purge:	N/A	

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
10:47	13.90	5.58	-10	1.10	1000.0	0.00	NA		0.7	light brown, no odor	N/A
10:52	14.59	5.44	-6	1.10	321.00	0.00	NA	0.14	1.4		N/A
10:57	14.52	5.40	-3	1.07	193.00	0.00	NA	0.07	1.75		N
11:02	14.62	5.35	1	1.05	85.70	0.00	NA	0.13	2.4		N
11:07	14.66	5.32	3	1.04	60.90	0.00	NA	0.1	2.9		N
11:12	14.60	5.30	6	1.03	40.60	0.00	NA	0.14	3.6		N
11:17	14.61	5.30	9	1.03	33.00	0.00	NA	0.12	4.2		N
11:22	14.62	5.29	10	1.02	28.8	0.00	NA	0.12	4.8		N
11:27	14.61	5.28	12	1.02	18.7	0.00	NA	0.12	5.4		N
11:32	14.59	5.27	14	1.02	17.9	0.00	NA	0.1	5.9		N
11:37	14.58	5.26	16	1.02	17.0	0.00	NA	0.1	6.4	Y	

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW09	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW09_011619
Project Number:	170487003	Well Depth:		Pine Number:	21202	Background PID (ppm):	0.1		
Site Location:	Bronx, NY	Well Diameter:		Pump Make and Model:	QED Sample Pro	PID Beneath Inner Cap (ppm):	414.4	Sample Date:	1/16/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:		Pine Number:	43733	Pump Intake Depth:	24'	Sample Time:	15:00
				Tubing Diameter:	1/4" x 3/8"	Depth to Water Before Purge:	N/A		

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
1:42	13.33	5.96	-71	1.65	1000.0	0.92	NA		0.25	turbid brown, petroleum-like odor	N/A
1:47	14.38	5.81	-83	1.59	755.00	1.23	NA	0.05	0.5		N/A
1:52	14.82	5.48	-87	1.55	510.00	1.42	NA	0.05	0.75		N
1:57	14.98	5.33	-88	1.51	403.00	0.56	NA	0.05	1		N
2:02	15.11	5.20	-88	1.48	243.00	0.42	NA	0.05	1.25		N
2:07	15.16	5.14	-88	1.44	149.00	2.82	NA	0.05	1.5		N
2:12	15.18	5.11	-87	1.43	120.00	0.29	NA	0.05	1.75		N
2:17	15.21	5.08	-87	1.42	113.0	0.29	NA	0.05	2		N
2:22	15.22	5.07	-86	1.41	92.6	0.39	NA	0.05	2.25		N
2:27	15.21	5.06	-86	1.41	70.6	0.38	NA	0.07	2.6		N
2:32	15.16	5.06	-85	1.40	72.7	0.72	NA	0.06	2.9		N
2:37	15.20	5.05	-85	1.40	36.6	0.59	NA	0.06	3.2		N
2:42	15.19	5.05	-85	1.40	27.5	0.47	NA	0.06	3.5	N	

Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
8. DTW = Depth to water
9. mS/cm = milli-Siemans per centimeter
10. NTU = Nephelometric Turbidity Unit
11. Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information			
Project Name:	Gerard + E. 146th	Well No.:	RMW10	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW10_011719		
Project Number:	170487003	Well Depth:	28'	Pine Number:	21058	Background PID (ppm):	0				
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	731.3	Sample Date:	1/17/2019		
Sampling Personnel:	T. Goodnough	Well Screen Interval:	18-28'	Pine Number:	042076	Pump Intake Depth:	24'				
						Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.16	Sample Time:	15:25

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft 2.68	Flow Rate (gpm) <0.13 gpm	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
14:35	14.75	7.51	-34	1.03	1000.0	4.04	19.16		0	dark brown, odor observed	N/A
14:40	18.04	7.20	-63	1.01	0.00	4.94	19.16	0.1	0.5	slightly brown, odor	N/A
14:45	18.51	7.18	-67	1.02	0.00	4.57	19.16	0.1	1	slightly brown, odor	N
14:50	19.04	7.18	-72	1.03	812.00	2.63	19.16	0.1	1.5	clear, odor	N
14:55	19.22	7.18	-77	1.01	265.00	2.70	19.16	0.1	2		N
15:00	19.19	7.18	-80	1.00	436.00	2.49	19.16	0.1	2.5		N
15:05	19.53	7.18	83	0.99	257.00	2.20	19.16	0.1	3		N
15:10	19.03	7.20	-86	0.99	647.0	2.68	19.16	0.1	3.5		N
15:15	18.42	7.21	-90	0.99	87.8	3.02	19.16	0.1	4		N
15:20	19.18	7.21	-92	1.00	31.1	1.85	19.16	0.1	4.5		N
15:25	19.42	7.21	-94	1.01	80.5	1.53	19.16	0.1	5		N
15:30	19.31	7.21	-95	0.99	14.7	1.44	19.16	0.1	5.5		N
15:35	19.33	7.21	-96	1.00	12.2	1.40	19.16	0.1	6		N

Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
8. DTW = Depth to water
9. mS/cm = milli-Siemans per centimeter
10. NTU = Nephelometric Turbidity Unit
11. Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information			
Project Name:	Gerard + E. 146th	Well No:	RMW11	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW11_011719		
Project Number:	170487003	Well Depth:	27.81	Pine Number:	21202	Background PID (ppm):	0.1				
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	26.2	Sample Date:	1/17/2019		
Sampling Personnel:	T. Goodnough	Well Screen Interval:	13-28'	Pine Number:	042076	Pump Intake Depth:	24'				
						Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.26	Sample Time:	13:45

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
12:33	13.73	6.96	-33	0.39	961.0	0.04	20.12		1.6	own, moderate pet	N/A
12:38	14.63	7.10	-55	0.38	736.00	0.00	20.12	0.08	2		N/A
12:43	14.79	7.13	-64	0.37	445.00	0.00	20.12	0.12	2.6		N
12:48	14.84	7.15	-70	0.37	240.00	0.00	20.12	0.13	3.25		N
12:53	14.90	7.16	-73	0.37	67.00	0.00	20.12	0.13	3.9		N
12:58	14.93	7.20	-77	0.37	31.50	0.00	20.13	0.12	4.5		N
1:03	14.98	7.20	-79	0.37	23.90	0.00	20.13	0.12	5.1		N
1:08	14.98	7.19	-80	0.37	17.4	0.00	20.14	0.1	5.6		N
1:13	14.99	7.16	-81	0.37	14.2	0.00	20.15	0.1	6.1		N
1:18	14.95	7.13	-82	0.37	10.2	0.00	20.15	0.12	6.7		N
1:23	15.00	7.14	-83	0.37	8.0	0.00	20.15	0.1	7.2		N
1:28	15.02	7.14	-83	0.37	6.8	0.00	20.15	0.1	7.7		N
1:33	15.01	7.14	-83	0.37	5.2	0.00	20.17	0.1	8.2		N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N

- Notes:**
- Well depths and groundwater depths were measured in feet below the top of well casing.
 - Well and tubing diameters are measured in inches.
 - PID = Photoionization Detector
 - PPM = Parts per million
 - pH = Hydrogen ion concentration
 - ORP = Oxidation-reduction potential, measured in millivolts (mV)
 - DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 - DTW = Depth to water
 - mS/cm = milli-Siemans per centimeter
 - NTU = Nephelometric Turbidity Unit
 - Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No.:	RMW14	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW14_011719
Project Number:	170487003	Well Depth:	27.15	Pine Number:	21202	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	35.9	Sample Date:	1/17/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	17-27'	Pine Number:	042076	Pump Intake Depth:	24'	Sample Time:	12:00
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.03		

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
10:42	11.43	7.13	-38	1.13	1000.0	1.61	19.48		0.8		N/A
10:47	12.68	7.13	-74	1.09	1000.00	0.53	19.49	0.08	1.2		N/A
10:52	14.15	7.05	-82	1.05	1000.00	0.00	19.50	0.06	1.5		N
10:57	15.24	7.05	-85	1.05	1000.00	0.00	19.50	0.18	2.4		N
11:02	15.29	7.16	-87	1.02	322.00	0.00	19.51	0.07	2.75		N
11:07	15.36	7.13	-88	0.99	187.00	0.00	19.52	0.11	3.3		N
11:12	15.38	7.08	-90	0.97	163.00	0.00	19.52	0.12	3.9		N
11:17	15.39	7.00	-91	0.98	126.0	0.00	19.52	0.12	4.5		N
11:22	15.36	6.98	-92	0.99	84.7	0.00	19.53	0.08	4.9		N
11:27	15.42	6.96	-93	1.00	33.0	0.00	19.55	0.12	5.5		N
11:32	15.51	6.91	-95	1.00	18.4	0.00	19.56	0.1	6		N
11:37	15.42	6.79	-96	0.99	27.4	0.00	19.58	0.12	6.6		N
11:42	15.40	6.77	-97	0.99	18.2	0.00	19.60	0.12	7.2		N

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit
 11. Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions			Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW16	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW16_011719	
Project Number:	170487003	Well Depth:	27'	Pine Number:	21058	Background PID (ppm):	0			
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.4	Sample Date:	1/17/2019	
Sampling Personnel:	T. Goodnough	Well Screen Interval:	17-27'	Pine Number:	042076	Pump Intake Depth:	24'	Sample Time:	13:15	
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.89			

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
12:10	15.75	6.15	192	2.08	1000.0	1.33	18.90		0	turbid brown	N/A
12:15	14.07	7.02	43	1.98	601.00	0.16	18.90	0.25	1.25		N/A
12:20	18.52	7.06	23	1.98	936.00	0.00	18.89	0.03	1.4		N
12:25	17.32	7.11	17	1.99	809.00	0.00	18.87	0.04	1.6		N
12:30	19.59	7.07	9	1.98	410.00	0.00	18.86	0.03	1.75	clear	N
12:35	19.44	7.06	5	1.96	135.00	0.00	18.85	0.25	3		N
12:40	18.43	7.06	3	1.98	120.00	0.00	18.85	0.14	3.7		N
12:45	19.02	7.06	0	1.96	49.8	0.00	18.84	0.1	4.2		N
12:50	19.63	7.06	-3	1.92	34.3	0.00	18.84	0.08	4.6		N
12:55	19.68	7.07	-5	1.92	15.3	0.00	18.84	0.08	5		N
13:00	19.58	7.07	-7	1.97	1.8	0.00	18.84	0.1	5.5		N
13:05	19.51	7.08	-9	1.97	0.0	0.00	18.84	0.08	5.9		N
13:10	19.55	7.08	-10	1.97	0.0	0.00	18.84	0.08	6.3		Y

- Notes:**
- Well depths and groundwater depths were measured in feet below the top of well casing.
 - Well and tubing diameters are measured in inches.
 - PID = Photoionization Detector
 - PPM = Parts per million
 - pH = Hydrogen ion concentration
 - ORP = Oxidation-reduction potential, measured in millivolts (mV)
 - DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 - DTW = Depth to water
 - mS/cm = milli-Siemans per centimeter
 - NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information			Sampling Conditions			Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW17	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy			Sample(s):	RMW17_011719
Project Number:	170487003	Well Depth:	25.65	Pine Number:	21202	Background PID (ppm):	0.0				
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.0			Sample Date:	1/17/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	18-28'	Pine Number:	042076	Pump Intake Depth:	24'				
Tubing Diameter: 3/8" x 1/2" Depth to Water Before Purge: 20.09											

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
8:35	12.45	7.16	46	1.89	1000.0	0.00	23.20		0.75	urbid brown, no odd	N/A
8:40	14.38	7.24	51	1.84	887.00	0.00	23.16	0.09	1.2		N/A
8:45	14.79	7.23	23	1.82	455.00	0.00	23.09	0.06	1.5		N
8:50	15.02	7.21	6	1.79	235.00	0.00	23.05	0.06	1.8		N
8:55	14.88	7.15	-4	1.78	141.00	0.00	23.02	0.04	2		N
9:00	15.15	7.09	-14	1.74	60.10	0.00	23.00	0.08	2.4		N
9:05	15.45	7.05	-22	1.72	33.30	0.00	22.98	0.07	2.75		N
9:10	15.35	7.02	-27	1.70	36.0	0.00	22.98	0.07	3.1		N
9:15	15.44	6.97	-32	1.68	19.3	0.00	22.97	0.08	3.5		N
9:20	15.50	6.95	-35	1.67	14.2	0.00	22.97	0.08	3.9		N
9:25	15.30	6.92	-39	1.65	9.9	0.00	22.96	0.1	4.4		N
9:30	15.39	6.91	-41	1.64	6.8	0.00	22.96	0.06	4.7		N
9:35	15.36	6.92	-41	1.64	5.7	0.00	22.95	0.06	5.0		N

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW18	Water Quality Device Model:	Horiba U-52	Weather:	clear, 20s	Sample(s):	RMW18_011419
Project Number:	170487003	Well Depth:	27.6	Pine Number:	21202	Background PID (ppm):	0.1		
Site Location:	Bronx, NY	Well Diameter:	2-inch	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	9.7	Sample Date:	1/14/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	18-28'	Pine Number:	042076	Pump Intake Depth:	24'		
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.71	Sample Time:	12:27

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
13:27	14.63	9.64	-24	1.00	740.0	0.70	19.75		0.7	brown turbid no odor	N/A
13:32	14.73	9.75	-45	0.99	940.00	0.00	19.75	0.06	1		N/A
13:37	15.29	9.67	-57	0.97	504.00	0.00	19.75	0.08	1.4		N
13:42	15.49	9.59	-57	0.95	367.00	0.00	19.75	0.12	2		N
13:47	15.63	9.53	-60	0.95	187.00	0.00	19.75	0.07	2.35		N
13:52	15.60	9.50	-61	0.95	194.00	0.00	19.75	0.07	2.7	brown no odor	N
13:57	14.98	9.47	-60	0.96	93.70	0.00	19.75	0.06	3.0		N
14:02	14.24	9.58	-59	0.95	86.3	0.00	19.75	0.05	3.25		N
14:07	15.24	9.46	-59	0.94	69.9	0.00	19.75	0.05	3.5		N
14:12	14.96	9.45	-59	0.95	64.8	0.00	19.75	0.05	3.75		N
14:17	16.10	9.40	-58	0.95	72.6	0.00	19.78	0.15	4.5		N
14:22	15.76	9.39	-57	0.95	39.4	0.00	19.78	0.1	5.0		N
14:27	15.77	9.38	-58	0.95	33.8	0.00	19.78	0.09	5.45		N

Notes:

- Well depths and groundwater depths were measured in feet below the top of well casing.
- Well and tubing diameters are measured in inches.
- PID = Photoionization Detector
- PPM = Parts per million
- pH = Hydrogen ion concentration
- ORP = Oxidation-reduction potential, measured in millivolts (mV)
- DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
- DTW = Depth to water
- mS/cm = milli-Siemans per centimeter
- NTU = Nephelometric Turbidity Unit

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW22	Water Quality Device Model:	Horiba U-52	Weather:	Clear-20's	Sample(s):	RMW22_011419
Project Number:	170487003	Well Depth:	27'	Pine Number:	21202	Background PID (ppm):	0.1		
Site Location:	Bronx, NY	Well Diameter:	2-inch	Pump Make and Model:	QED Sample Pro	PID Beneath Inner Cap (ppm):	0.1	Sample Date:	1/14/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	17-27'	Pine Number:	43733	Pump Intake Depth:	25'		
				Tubing Diameter:	1/4" x 3/8"	Depth to Water Before Purge:	N/A	Sample Time:	12:22

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
11:22	12.20	9.57	159	0.50	830.0	0.64	N/A		0	turbid brown	N/A
11:27	13.10	9.53	38	0.48	670.00	0.48	N/A	0.2	1		N/A
11:32	13.36	9.77	-54	0.52	1000.00	1.13	N/A	0.12	1.6		N
11:37	13.46	9.91	-82	0.52	846.00	0.75	N/A	0.12	2.2		N
11:42	13.50	10.06	-94	0.52	678.00	0.78	N/A	0.16	3		N
11:47	12.76	10.09	-99	0.51	410.00	0.38	N/A	0.05	3.25		N
11:52	13.13	10.21	-102	0.52	369.00	1.12	N/A	0.05	3.5		N
11:57	13.27	10.17	-103	0.48	166.0	0.00	N/A	0.06	3.8		N
12:02	13.36	10.19	-102	0.47	167.0	0.00	N/A	0.1	4.3		N
12:07	13.40	10.18	-103	0.48	175.0	0.00	N/A	0.1	4.8		Y
12:12	13.41	10.17	-104	0.48	121.0	0.00	N/A	0.1	5.3		
12:17	13.41	10.16	-104	0.48	113.0	0.00	N/A	0.1	5.8		
12:22	13.41	10.15	-105	0.48	96.2	0.00	N/A	0.1	6.3		

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	404 Exterior Street	Well No.:	RMW23	Water Quality Device Model:	Horiba U52	Weather:	Sunny, 70-80F	Sample(s):	RMW23_071219
Project Number:	170487001	Well Depth:	19	Pine Number:	21054	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2	Pump Make and Model:	Peristaltic	PID Beneath Inner Cap (ppm):	0	Sample Date:	7/12/2019
Sampling Personnel:	Patrick Stovall	Well Screen Interval:	9	Pine Number:	19943	Pump Intake Depth:	18.00	Sample Time:	13:05
		Interval:	19	Tubing Diameter:		Depth to Water Before Purge:	13.3		

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
12:15	18.41	7.25	4	0.783	171.0	0.44	13.30		0.5		N/A
12:20	17.63	7.22	-5	0.679	27.3	0.00	13.30	0.1	1		N/A
12:25	16.98	7.14	-11	0.689	15.1	0.00	13.30	0.1	1.5		N
12:30	16.95	7.08	-18	0.702	9.2	0.00	13.30	0.1	2		N
12:35	17.15	7.10	-23	0.707	6.7	0.00	13.30	0.05	2.25		N
12:40	17.06	7.10	-31	0.707	6.1	0.00	13.30	0.15	3		N
12:45	16.81	7.07	-32	0.711	5.4	0.00	13.30	0.1	3.5		N
12:50	16.88	7.07	-35	0.715	5.9	0.00	13.30	0.1	4		N
12:55	16.94	7.06	-36	0.709	5.8	0.00	13.30	0.05	4.25		Y
											N
											N
											N
											N
											N
											N
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Notes:
 1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemens per centimeter
 10. NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	404 Exterior Street	Well No:	RMW25	Water Quality Device Model:	Horiba U52	Weather:	Sunny, 70-80F	Sample(s):	RMW25_071219
Project Number:	170487001	Well Depth:	20	Pine Number:	21054	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2	Pump Make and Model:	Peristaltic	PID Beneath Inner Cap (ppm):	0	Sample Date:	7/12/2019
Sampling Personnel:	Patrick Stovall	Well Screen Interval:	10-Jan	Pine Number:	19943	Pump Intake Depth:	16.00		
		Interval:	20	Tubing Diameter:		Depth to Water Before Purge:	12.21	Sample Time:	10:35

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?	
BEGIN PURGING												
9:25	20.58	6.52	199	0.649	132.0	0.49	13.20		0.25		N/A	
9:30	18.86	6.69	70	0.615	125.0	0.04	13.20	0.05	0.5		N/A	
9:35	16.72	6.72	2	0.637	200.0	0.08	14.05	0.05	0.75		N	
9:40	16.64	6.75	-29	0.650	455.0	0.04	14.24	0.1	1.25		N	
9:45	17.01	6.78	-47	0.661	458.0	0.04	14.24	0.07	1.6		N	
9:50	16.82	6.79	-58	0.671	507.0	0.04	14.30	0.08	2		N	
9:55	17.06	6.74	-62	0.676	325.0	0.02	14.10	0.05	2.25	light brown, no odor	N	
10:00	16.96	6.77	-66	0.677	280.0	0.03	14.10	0.05	2.5		N	
10:05	16.93	6.75	-66	0.681	184.0	0.00	14.20	0.05	2.75		N	
10:10	16.44	6.66	-66	0.692	167.0	0.96	14.20	0.1	3.25		N	
10:15	16.52	6.67	-65	0.687	135.0	0.00	14.25	0.05	3.5		N	
10:20	16.68	6.71	-72	0.693	145.0	0.01	14.30	0.05	3.75		N	
10:25	17.12	6.74	-76	0.699	109.0	0.07	14.30	0.1	4.25		N	
10:30	16.01	6.67	-69	0.703	129.0	0.04	14.30	0.05	4.5		N	

- Notes:**
- Well depths and groundwater depths were measured in feet below the top of well casing.
 - Well and tubing diameters are measured in inches.
 - PID = Photoionization Detector
 - PPM = Parts per million
 - pH = Hydrogen ion concentration
 - ORP = Oxidation-reduction potential, measured in millivolts (mV)
 - DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 - DTW = Depth to water
 - mS/cm = milli-Siemens per centimeter
 - NTU = Nephelometric Turbidity Unit
 - Well did not stabilize; sampled after 1 hour of purging.

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APPENDIX E

SOIL VAPOR CONSTRUCTION AND SAMPLE LOGS

AIR SAMPLING LOG SHEET

Sample Number: RAA01_123118

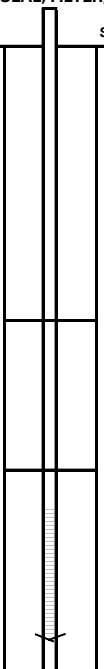
PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001	
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A	
SAMPLER: Tyler Goodnough		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018
INSPECTOR: Tyler Goodnough		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: N 5-10 mph Precipitation: None Pressure: N/A	
METHOD OF INSTALLATION AND SAMPLING: Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.2 parts per million. Sample consisted of 2.7-liter Summa canister fitted with a 2-hour flow control valve. The flow controller was zeroed and the valve opened to initiate the 2-hour sample collection. The sample and flow controller were checked each hour during sampling to ensure proper operation.			
SAMPLE DETAILS		SAMPLE LOCATION SKETCH	
HEIGHT ABOVE GROUND (FT):	3	See Sample Location Plan	
PID BEFORE SAMPLE (PPM):	0.2		
SAMPLE START TIME:	9:00		
SAMPLE STOP TIME:	11:00		
TOTAL SAMPLE TIME (MIN):	125		
REGULATOR FLOW RATE (L/MIN):	0.022		
VOLUME OF SAMPLE (LITERS):	2.7		
PID AFTER SAMPLE (PPM):	0.2		
SAMPLE MOISTURE CONTENT:	N/A		
CAN SERIAL NUMBER:	2078		
REGULATOR SERIAL NUMBER:	972		
CAN START VACUUM PRESS. (" HG):	-30.63		
CAN STOP VACUUM PRESS. (" HG):	-5.42		
NOTES			
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AIR SAMPLING LOG SHEET

Sample Number: RAA02

PROJECT: 404 Exterior Street		PROJECT NO.: 170487001	
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A	
SAMPLER: Seth Sieger		SAMPLE DATE STARTED: 7/15/2019	DATE FINISHED: 7/15/2019
INSPECTOR: Seth Sieger		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):	
		Temp:	75-85° F
		Wind:	N 0-5 mph
		Precipitation:	None
		Pressure:	29.90 in Hg
METHOD OF INSTALLATION AND SAMPLING: Langan field screened the sample location with a MiniRAE 3000 photoionization detector prior to sampling. Sample consisted of 2.7 L Summa canister fitted with an 8-hour flow control valve. The flow controller was zeroed and valve opened to initiate the 8-hour sample collection. The sample and flow controller were checked each hour during sampling to ensure proper operation.			
SAMPLE DETAILS		SAMPLE LOCATION SKETCH	
HEIGHT ABOVE GROUND (FT):	32"	See Sample Location Plan	
PID BEFORE SAMPLE (PPM):	0.0		
SAMPLE START TIME:	9:07		
SAMPLE STOP TIME:	17:07		
TOTAL SAMPLE TIME (MIN):	480		
REGULATOR FLOW RATE (L/MIN):	0.006		
VOLUME OF SAMPLE (LITERS):	2.7		
PID AFTER SAMPLE (PPM):	0.0		
SAMPLE MOISTURE CONTENT:	N/A		
CAN SERIAL NUMBER:	202		
REGULATOR SERIAL NUMBER:	1248		
CAN START VACUUM PRESS. (" HG):	-30.1		
CAN STOP VACUUM PRESS. (" HG):	-7.03		
NOTES			
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SOIL VAPOR SAMPLING LOG SHEET
 Sample Number: RSV01_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001		
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A		
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/26/2018	DATE FINISHED: 12/26/2018	
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018	
INSTALLATION EQUIPMENT: Geoprobe® 7822 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister		
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough		
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: N 5-10 mph Precipitation: 0" Pressure: N/A		
METHOD OF INSTALLATION AND PURGING: Advance Geoprobe 7730 DT to 8 feet below grade surface (bgs), install 2-inch soil vapor probe, backfill with No. 2 sand to 6 feet bgs, seal with hydrated bentonite to 5 feet bgs, backfill with No. 2 sand to 1 foot bgs, and seal to surface with hydrated bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.2 parts per million.				
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: No. 2 Sand		
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite		
BOREHOLE DIAMETER: 3-inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand		
PURGE VOLUME (L): 1.00		IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)		DEPTH (FEET FROM SURFACE)
PURGE FLOW RATE (ML/MIN): 200				
PID AFTER PURGE (PPM): 0.2		SURFACE		SURFACE
HELIUM TESTS		SURFACE		
HELIUM TEST IN BUCKET(%): Pre-sampling: 31.0% Post-sampling: 2.7%				5.00
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%				
SAMPLE START TIME: 9:27				6.00
SAMPLE STOP TIME: 11:29				
TOTAL SAMPLE TIME (MIN): 122				8.00
REGULATOR FLOW RATE (L/MIN): 0.022				
VOLUME OF SAMPLE (LITERS): 2.7				
PID AFTER SAMPLE (PPM): 0.2				
SAMPLE MOISTURE CONTENT: N/A				
CAN SERIAL NUMBER: 2206				
REGULATOR SERIAL NUMBER: 575				
CAN START VACUUM PRESS. (" HG): -29.47				
CAN STOP VACUUM PRESS. (" HG): -5.69				
SAMPLE LOCATION SKETCH				
See Sample Location Plan				
NOTES				
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SOIL VAPOR SAMPLING LOG SHEET
 Sample Number: RSV02_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																																			
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																																			
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/27/2018	DATE FINISHED: 12/27/2018																																		
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																																		
INSTALLATION EQUIPMENT: Geoprobe® 7730 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																																			
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																																			
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: N 5-10 mph Precipitation: 0" Pressure: N/A																																			
METHOD OF INSTALLATION AND PURGING: Advance Geoprobe 7730 DT to 9 feet below grade surface (bgs), install 2-inch soil vapor probe, backfill with No. 2 sand to 7 feet bgs, seal with hydrated bentonite to 6 feet bgs, backfill with No. 2 sand to 1 foot bgs, and seal to surface with hydrated bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.1 parts per million.																																					
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: No. 2 Sand																																			
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																																			
BOREHOLE DIAMETER: 3-inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																																			
PURGE VOLUME (L): 1.00			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">PURGE VOLUME (L):</th> <th style="width:30%;">PURGE FLOW RATE (ML/MIN):</th> <th style="width:30%;">PID AFTER PURGE (PPM):</th> <th style="width:10%;">HELIUM TESTS</th> <th style="width:10%;">HELIUM TEST IN BUCKET(%):</th> <th style="width:10%;">HELIUM TEST IN TUBE (PPM):</th> <th style="width:10%;">SAMPLE START TIME:</th> <th style="width:10%;">SAMPLE STOP TIME:</th> <th style="width:10%;">TOTAL SAMPLE TIME (MIN):</th> <th style="width:10%;">REGULATOR FLOW RATE (L/MIN):</th> <th style="width:10%;">VOLUME OF SAMPLE (LITERS):</th> <th style="width:10%;">PID AFTER SAMPLE (PPM):</th> <th style="width:10%;">SAMPLE MOISTURE CONTENT:</th> <th style="width:10%;">CAN SERIAL NUMBER:</th> <th style="width:10%;">REGULATOR SERIAL NUMBER:</th> <th style="width:10%;">CAN START VACUUM PRESS. (" HG):</th> <th style="width:10%;">CAN STOP VACUUM PRESS. (" HG):</th> </tr> </thead> <tbody> <tr> <td>1.00</td> <td>200</td> <td>0.1</td> <td>Pre-sampling Post-sampling</td> <td>13.4% 13.1%</td> <td>0.0% 0.0%</td> <td>9:13</td> <td>11:17</td> <td>125</td> <td>0.022</td> <td>2.7</td> <td>0.1</td> <td>N/A</td> <td>2299</td> <td>138</td> <td>-30.8</td> <td>-4.84</td> </tr> </tbody> </table>	PURGE VOLUME (L):	PURGE FLOW RATE (ML/MIN):	PID AFTER PURGE (PPM):	HELIUM TESTS	HELIUM TEST IN BUCKET(%):	HELIUM TEST IN TUBE (PPM):	SAMPLE START TIME:	SAMPLE STOP TIME:	TOTAL SAMPLE TIME (MIN):	REGULATOR FLOW RATE (L/MIN):	VOLUME OF SAMPLE (LITERS):	PID AFTER SAMPLE (PPM):	SAMPLE MOISTURE CONTENT:	CAN SERIAL NUMBER:	REGULATOR SERIAL NUMBER:	CAN START VACUUM PRESS. (" HG):	CAN STOP VACUUM PRESS. (" HG):	1.00	200	0.1	Pre-sampling Post-sampling	13.4% 13.1%	0.0% 0.0%	9:13	11:17	125	0.022	2.7	0.1	N/A	2299	138	-30.8	-4.84
PURGE VOLUME (L):	PURGE FLOW RATE (ML/MIN):			PID AFTER PURGE (PPM):	HELIUM TESTS	HELIUM TEST IN BUCKET(%):	HELIUM TEST IN TUBE (PPM):	SAMPLE START TIME:	SAMPLE STOP TIME:	TOTAL SAMPLE TIME (MIN):	REGULATOR FLOW RATE (L/MIN):	VOLUME OF SAMPLE (LITERS):	PID AFTER SAMPLE (PPM):	SAMPLE MOISTURE CONTENT:	CAN SERIAL NUMBER:	REGULATOR SERIAL NUMBER:	CAN START VACUUM PRESS. (" HG):	CAN STOP VACUUM PRESS. (" HG):																			
1.00	200			0.1	Pre-sampling Post-sampling	13.4% 13.1%	0.0% 0.0%	9:13	11:17	125	0.022	2.7	0.1	N/A	2299	138	-30.8	-4.84																			
PURGE FLOW RATE (ML/MIN): 200																																					
PID AFTER PURGE (PPM): 0.1																																					
HELIUM TESTS																																					
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SAMPLE LOCATION SKETCH		NOTES																																			
See Sample Location Plan																																					

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV01_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																							
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																							
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/20/2018	DATE FINISHED: 12/20/2018																						
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																						
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																							
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																							
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																							
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.4 parts per million.																									
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																							
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																							
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																							
PURGE VOLUME (L): 1.00		<table border="1"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> </thead> <tbody> <tr> <td>SURFACE</td> <td>SURFACE</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Top of Seal</td> <td>0</td> </tr> <tr> <td></td> <td></td> <td>Top of Pack</td> <td>5"</td> </tr> <tr> <td></td> <td></td> <td>Tube Depth</td> <td>6"</td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE					Top of Seal	0			Top of Pack	5"			Tube Depth	6"
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																				
(SEAL, FILTER, ETC.)																									
SURFACE	SURFACE																								
				Top of Seal	0																				
				Top of Pack	5"																				
				Tube Depth	6"																				
PURGE FLOW RATE (ML/MIN): 200																									
PID AFTER PURGE (PPM): 0.4																									
HELIUM TESTS																									
Pre-sampling Post-sampling																									
HELIUM TEST IN BUCKET(%): 16.9% 13.4%																									
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																									
SAMPLE START TIME: 8:55																									
SAMPLE STOP TIME: 10:55																									
TOTAL SAMPLE TIME (MIN): 120																									
REGULATOR FLOW RATE (L/MIN): 0.022																									
VOLUME OF SAMPLE (LITERS): 2.7																									
PID AFTER SAMPLE (PPM): 0.3																									
SAMPLE MOISTURE CONTENT: N/A																									
CAN SERIAL NUMBER: 2225																									
REGULATOR SERIAL NUMBER: 934																									
CAN START VACUUM PRESS. (" HG): -29																									
CAN STOP VACUUM PRESS. (" HG): -4.3																									
SAMPLE LOCATION SKETCH		NOTES																							
See Sample Location Plan																									

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV02_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																							
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																							
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/27/2018	DATE FINISHED: 12/27/2018																						
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																						
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																							
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																							
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																							
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.4 parts per million.																									
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																							
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																							
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																							
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> <tr> <td colspan="2" style="text-align: center;">Top of Seal</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td colspan="2" style="text-align: center;">Top of Pack</td> <td style="text-align: center;">13"</td> <td></td> </tr> <tr> <td colspan="2" style="text-align: center;">Tube Depth</td> <td style="text-align: center;">14"</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE			Top of Seal		0		Top of Pack		13"		Tube Depth		14"	
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																				
(SEAL, FILTER, ETC.)																									
SURFACE	SURFACE																								
Top of Seal				0																					
Top of Pack				13"																					
Tube Depth				14"																					
PURGE FLOW RATE (ML/MIN): 200																									
PID AFTER PURGE (PPM): 0.4																									
HELIUM TESTS																									
Pre-sampling Post-sampling																									
HELIUM TEST IN BUCKET(%): 13.3% 14.1%																									
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																									
SAMPLE START TIME: 10:10																									
SAMPLE STOP TIME: 12:10																									
TOTAL SAMPLE TIME (MIN): 120																									
REGULATOR FLOW RATE (L/MIN): 0.027																									
VOLUME OF SAMPLE (LITERS): 2.7																									
PID AFTER SAMPLE (PPM): 0.2																									
SAMPLE MOISTURE CONTENT: N/A																									
CAN SERIAL NUMBER: 2599																									
REGULATOR SERIAL NUMBER: 1143																									
CAN START VACUUM PRESS. (" HG): -30.72																									
CAN STOP VACUUM PRESS. (" HG): -6.65																									
SAMPLE LOCATION SKETCH																									
See Sample Location Plan		NOTES																							
<p>Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727</p>																									

SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV03_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																							
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																							
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/27/2018	DATE FINISHED: 12/27/2018																						
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																						
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																							
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																							
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																							
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.4 parts per million.																									
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																							
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																							
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																							
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Top of Seal</td> <td></td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td style="text-align: center;">Top of Pack</td> <td></td> <td style="text-align: center;">13"</td> <td></td> </tr> <tr> <td style="text-align: center;">Tube Depth</td> <td></td> <td style="text-align: center;">14"</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE			Top of Seal		0		Top of Pack		13"		Tube Depth		14"	
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																				
(SEAL, FILTER, ETC.)																									
SURFACE	SURFACE																								
Top of Seal				0																					
Top of Pack				13"																					
Tube Depth				14"																					
PURGE FLOW RATE (ML/MIN): 200																									
PID AFTER PURGE (PPM): 0.4																									
HELIUM TESTS																									
Pre-sampling Post-sampling																									
HELIUM TEST IN BUCKET(%): 20.2% 15.4%																									
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																									
SAMPLE START TIME: 10:25																									
SAMPLE STOP TIME: 12:26																									
TOTAL SAMPLE TIME (MIN): 121																									
REGULATOR FLOW RATE (L/MIN): 0.022																									
VOLUME OF SAMPLE (LITERS): 2.7																									
PID AFTER SAMPLE (PPM): 0.2																									
SAMPLE MOISTURE CONTENT: N/A																									
CAN SERIAL NUMBER: 174																									
REGULATOR SERIAL NUMBER: 387																									
CAN START VACUUM PRESS. (" HG): -30.8																									
CAN STOP VACUUM PRESS. (" HG): -5.99																									
SAMPLE LOCATION SKETCH		NOTES																							
See Sample Location Plan																									

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV05_010919

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																								
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																								
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/20/2018	DATE FINISHED: 12/20/2018																							
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 1/9/2019	DATE FINISHED: 1/9/2019																							
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																								
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																								
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																								
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.5 parts per million.																										
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																								
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																								
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																								
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">IMPLANT/PROBE DETAILS</th> <th style="text-align: center;">DEPTH</th> <th rowspan="2" style="text-align: center;">NOTES</th> </tr> <tr> <th colspan="2" style="text-align: center;">(SEAL, FILTER, ETC.)</th> <th style="text-align: center;">(FEET FROM SURFACE)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Top of Seal</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Top of Pack</td> <td style="text-align: center;">3"</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Tube Depth</td> <td style="text-align: center;">4"</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH	NOTES	(SEAL, FILTER, ETC.)		(FEET FROM SURFACE)	SURFACE	SURFACE				Top of Seal	0			Top of Pack	3"			Tube Depth	4"	
IMPLANT/PROBE DETAILS				DEPTH	NOTES																					
(SEAL, FILTER, ETC.)				(FEET FROM SURFACE)																						
SURFACE	SURFACE																									
	Top of Seal			0																						
	Top of Pack			3"																						
	Tube Depth			4"																						
PURGE FLOW RATE (ML/MIN): 200																										
PID AFTER PURGE (PPM): 0.5																										
HELIUM TESTS																										
Pre-sampling Post-sampling																										
HELIUM TEST IN BUCKET(%): 17.9% 15.2%																										
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																										
SAMPLE START TIME: 9:16																										
SAMPLE STOP TIME: 11:59																										
TOTAL SAMPLE TIME (MIN): 163																										
REGULATOR FLOW RATE (L/MIN): 0.017																										
VOLUME OF SAMPLE (LITERS): 2.7																										
PID AFTER SAMPLE (PPM): 0.2																										
SAMPLE MOISTURE CONTENT: N/A																										
CAN SERIAL NUMBER: 353																										
REGULATOR SERIAL NUMBER: 624																										
CAN START VACUUM PRESS. (" HG): -29.95																										
CAN STOP VACUUM PRESS. (" HG): -11.38																										
SAMPLE LOCATION SKETCH																										
See Sample Location Plan																										
NOTES																										

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV06_010919

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																							
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																							
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/20/2018	DATE FINISHED: 12/20/2018																						
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 1/9/2019	DATE FINISHED: 1/9/2019																						
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																							
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																							
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																							
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.3 parts per million.																									
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																							
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																							
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																							
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Top of Seal</td> <td></td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td style="text-align: center;">Top of Pack</td> <td></td> <td style="text-align: center;">9"</td> <td></td> </tr> <tr> <td style="text-align: center;">Tube Depth</td> <td></td> <td style="text-align: center;">10"</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE			Top of Seal		0		Top of Pack		9"		Tube Depth		10"	
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																				
(SEAL, FILTER, ETC.)																									
SURFACE	SURFACE																								
Top of Seal				0																					
Top of Pack				9"																					
Tube Depth				10"																					
PURGE FLOW RATE (ML/MIN): 200																									
PID AFTER PURGE (PPM): 0.3																									
HELIUM TESTS																									
Pre-sampling Post-sampling																									
HELIUM TEST IN BUCKET(%): 22.3% 24.3%																									
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																									
SAMPLE START TIME: 8:33																									
SAMPLE STOP TIME: 10:35																									
TOTAL SAMPLE TIME (MIN): 122																									
REGULATOR FLOW RATE (L/MIN): 0.022																									
VOLUME OF SAMPLE (LITERS): 2.7																									
PID AFTER SAMPLE (PPM): 0.2																									
SAMPLE MOISTURE CONTENT: N/A																									
CAN SERIAL NUMBER: 207																									
REGULATOR SERIAL NUMBER: 854																									
CAN START VACUUM PRESS. (" HG): -29.79																									
CAN STOP VACUUM PRESS. (" HG): -3.55																									
SAMPLE LOCATION SKETCH																									
See Sample Location Plan																									
NOTES																									

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV07_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																								
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																								
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/20/2018	DATE FINISHED: 12/20/2018																							
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																							
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																								
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																								
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																								
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.2 parts per million.																										
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																								
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																								
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																								
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">IMPLANT/PROBE DETAILS</th> <th style="text-align: center;">DEPTH</th> <th rowspan="2" style="text-align: center;">NOTES</th> </tr> <tr> <th colspan="2" style="text-align: center;">(SEAL, FILTER, ETC.)</th> <th style="text-align: center;">(FEET FROM SURFACE)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Top of Seal</td> <td></td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td style="text-align: center;">Top of Pack</td> <td></td> <td style="text-align: center;">9"</td> <td></td> </tr> <tr> <td style="text-align: center;">Tube Depth</td> <td></td> <td style="text-align: center;">10"</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH	NOTES	(SEAL, FILTER, ETC.)		(FEET FROM SURFACE)	SURFACE	SURFACE			Top of Seal		0		Top of Pack		9"		Tube Depth		10"	
IMPLANT/PROBE DETAILS				DEPTH	NOTES																					
(SEAL, FILTER, ETC.)				(FEET FROM SURFACE)																						
SURFACE	SURFACE																									
Top of Seal				0																						
Top of Pack				9"																						
Tube Depth				10"																						
PURGE FLOW RATE (ML/MIN): 200																										
PID AFTER PURGE (PPM): 0.2																										
HELIUM TESTS																										
Pre-sampling Post-sampling																										
HELIUM TEST IN BUCKET(%): 26.2% 17.4%																										
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																										
SAMPLE START TIME: 9:51																										
SAMPLE STOP TIME: 11:53																										
TOTAL SAMPLE TIME (MIN): 122																										
REGULATOR FLOW RATE (L/MIN): 0.022																										
VOLUME OF SAMPLE (LITERS): 2.7																										
PID AFTER SAMPLE (PPM): 0.1																										
SAMPLE MOISTURE CONTENT: N/A																										
CAN SERIAL NUMBER: 2210																										
REGULATOR SERIAL NUMBER: 507																										
CAN START VACUUM PRESS. (" HG): -30.33																										
CAN STOP VACUUM PRESS. (" HG): -6.41																										
SAMPLE LOCATION SKETCH		NOTES																								
See Sample Location Plan																										

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET
 Sample Number: RSSV08_071119

PROJECT: 404 Exterior Street		PROJECT NO.: 170487001																									
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																									
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services Corp.		INSTALLATION DATE STARTED: 7/11/2019	DATE FINISHED: 7/11/2019																								
INSTALLATION FOREMAN: Adam Hutchinson		SAMPLE DATE STARTED: 7/15/2019	DATE FINISHED: 7/15/2019																								
INSTALLATION EQUIPMENT: Geoprobe® 7730 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																									
INSPECTOR: Patrick Stovall		SAMPLER: Seth Sieger																									
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 75-85° F Wind: N 0-5 mph Precipitation: None Pressure: 29.90 in Hg																									
METHOD OF INSTALLATION AND PURGING: AARCO advanced subslab vapor point to 3-inches below the top of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. PID reading was 0.0 ppm.																											
TUBING TYPE/DIAMETER: 3/16-inch ID, 1/4-inch OD Teflon-Lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: None																									
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																									
BOREHOLE DIAMETER: 5/8"		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																									
PURGE VOLUME (L): 0.02		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">IMPLANT/PROBE DETAILS</th> <th style="text-align: center;">DEPTH</th> <th style="text-align: center;">NOTES</th> </tr> <tr> <th colspan="2" style="text-align: center;">(SEAL, FILTER, ETC.)</th> <th style="text-align: center;">(FEET FROM SURFACE)</th> <th></th> </tr> <tr> <th style="text-align: center;">SURFACE</th> <th style="text-align: center;">SURFACE</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Top of Seal</td> <td style="text-align: center;">Top of Seal</td> <td style="text-align: center;">0.0</td> <td></td> </tr> <tr> <td style="text-align: center;">Top of Pack</td> <td style="text-align: center;">Top of Pack</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Tube Depth</td> <td style="text-align: center;">Tube Depth</td> <td style="text-align: center;">0.4</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH	NOTES	(SEAL, FILTER, ETC.)		(FEET FROM SURFACE)		SURFACE	SURFACE			Top of Seal	Top of Seal	0.0		Top of Pack	Top of Pack			Tube Depth	Tube Depth	0.4	
IMPLANT/PROBE DETAILS				DEPTH	NOTES																						
(SEAL, FILTER, ETC.)				(FEET FROM SURFACE)																							
SURFACE	SURFACE																										
Top of Seal	Top of Seal			0.0																							
Top of Pack	Top of Pack																										
Tube Depth	Tube Depth			0.4																							
PURGE FLOW RATE (ML/MIN): 200																											
PID AFTER PURGE (PPM): 0																											
HELIUM TESTS																											
Pre-sampling Post-sampling																											
HELIUM TEST IN BUCKET(%): 17.2% 16.4%																											
HELIUM TEST IN TUBE (PPM): 0.0 0.0																											
SAMPLE START TIME: 9:04																											
SAMPLE STOP TIME: 17:04																											
TOTAL SAMPLE TIME (MIN): 480																											
REGULATOR FLOW RATE (L/MIN): 0.006																											
VOLUME OF SAMPLE (LITERS): 2.7																											
PID AFTER SAMPLE (PPM): 0																											
SAMPLE MOISTURE CONTENT: N/A																											
CAN SERIAL NUMBER: 195																											
REGULATOR SERIAL NUMBER: 396																											
CAN START VACUUM PRESS. (" HG): -29.94																											
CAN STOP VACUUM PRESS. (" HG): -17.88																											
SAMPLE LOCATION SKETCH		NOTES																									
See Sample Location Plan		RSSV09 was adjacent to RB25																									

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET
 Sample Number: RSSV09_071119

PROJECT: 404 Exterior Street		PROJECT NO.: 170487001																					
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: n/a																					
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services Corp.		INSTALLATION DATE STARTED: 7/11/2019	DATE FINISHED: 7/11/2019																				
INSTALLATION FOREMAN: Adam Hutchinson		SAMPLE DATE STARTED: 7/15/2019	DATE FINISHED: 7/15/2019																				
INSTALLATION EQUIPMENT: Geoprobe® 7730 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																					
INSPECTOR: Patrick Stovall		SAMPLER: Seth Sieger																					
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 75-85° F Wind: N 0-5 mph Precipitation: None Pressure: 29.90 in Hg																					
METHOD OF INSTALLATION AND PURGING: AARCO advanced subslab vapor point to 3-inches below the top of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. PID reading was 0.0 ppm.																							
TUBING TYPE/DIAMETER: 3/16-inch ID, 1/4-inch OD Teflon-Lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: None																					
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																					
BOREHOLE DIAMETER: 5/8"		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																					
PURGE VOLUME (L): 0.02		<table border="1"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> <tr> <th>SURFACE</th> <th>SURFACE</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td align="center" rowspan="3"> </td> <td align="center">Top of Seal</td> <td align="center">0.0</td> <td></td> </tr> <tr> <td align="center">Top of Pack</td> <td></td> <td></td> </tr> <tr> <td align="center">Tube Depth</td> <td align="center">0.416</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE				Top of Seal	0.0		Top of Pack			Tube Depth	0.416	
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																		
(SEAL, FILTER, ETC.)																							
SURFACE	SURFACE																						
	Top of Seal			0.0																			
	Top of Pack																						
	Tube Depth			0.416																			
PURGE FLOW RATE (ML/MIN): 200																							
PID AFTER PURGE (PPM): 0																							
HELIUM TESTS																							
Pre-sampling Post-sampling																							
HELIUM TEST IN BUCKET(%): 15.8% 15.4%																							
HELIUM TEST IN TUBE (PPM): 0.0 0.0																							
SAMPLE START TIME: 9:01																							
SAMPLE STOP TIME: 17:01																							
TOTAL SAMPLE TIME (MIN): 480																							
REGULATOR FLOW RATE (L/MIN): 0.006																							
VOLUME OF SAMPLE (LITERS): 2.7																							
PID AFTER SAMPLE (PPM): 0																							
SAMPLE MOISTURE CONTENT: N/A																							
CAN SERIAL NUMBER: 411																							
REGULATOR SERIAL NUMBER: 435																							
CAN START VACUUM PRESS. (" HG): -30.01																							
CAN STOP VACUUM PRESS. (" HG): -18.51																							
SAMPLE LOCATION SKETCH																							
See Sample Location Plan		NOTES																					
		RSSV09 was adjacent to RB28																					

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.
 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

APPENDIX F

DATA USABILITY SUMMARY REPORTS

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 13, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Groundwater Samples Collected in January 2019
Langan Project No.: 170487003

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of groundwater samples collected in January 2019 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the Site") in Bronx, NY. The samples were analyzed by Alpha Analytical Laboratories of Westborough, MA (NYSDOH ELAP registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCB), perfluorinated alkyl substances (PFAS), total and dissolved metals including mercury (Hg), hexavalent chromium, and total cyanide by the analytical methods listed below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Methods 8270D and 8270D SIM
- Pesticides by SW-846 Method 8081B
- Herbicides by SW-846 Method 8151A
- PCBs by SW-846 Method 8082A
- PFAS by EPA Method 537M
- Total and Dissolved Metals by SW-846 Method 6020B
- Total and Dissolved Hg by SW-846 Method 7470A
- Hexavalent Chromium by SW-846 Method 7196A
- Total Cyanide by SW-846 Method 9012B

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

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TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1901689	L1901689-01	RMW18_011419	01/14/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1901689	L1901689-02	RMW22_011419	01/14/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1901689	L1901689-03	GWFB01_011419	01/14/19	PFAs, 1,4-Dioxane
L1901689	L1901689-04	GWTB01_011419	01/14/19	VOCs
L1901865	L1901865-01	RMW03_011519	01/15/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1901865	L1901865-02	RMW04_011519	01/15/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1901865	L1901865-03	RMW05_011519	01/15/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1901865	L1901865-04	GWDUP01_011519	01/15/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1901865	L1901865-05	GWTB02_011519	01/15/19	VOCs
L1902070	L1902070-01	RMW01_011619	01/16/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1902070	L1902070-02	RMW07_011619	01/16/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1902070	L1902070-03	RMW09_11619	01/16/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1902070	L1902070-04	GWFB02_011619	01/16/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1902070	L1902070-05	GWTB03_011619	01/16/19	VOCs
L1902340	L1902340-01	RMW10_011719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-02	RMW11_011719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-03	RMW14_011719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-04	RMW16_11719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-05	RMW17_011719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-06	GWTB04_011719	01/17/19	VOCs

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Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-36A, "Pesticide Data Validation" (October 2016, Revision 1), USEPA Region II SOP #HW-3b, "ICP-MS Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and Cyanide Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, serial dilutions, dual column performance, field duplicate, and trip blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

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If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION:

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RMW18_011419	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW18_011419	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW18_011419	8151A	93-76-5	2,4,5-T	UJ
RMW18_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
RMW18_011419	8260C	123-91-1	1,4-Dioxane	UJ
RMW18_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW18_011419	8260C	74-83-9	Bromomethane	UJ
RMW18_011419	8260C	74-87-3	Chloromethane	UJ
RMW18_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW18_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW18_011419	8270D	95-94-3	1,2,4,5-Tetrachlorobenzene	UJ
RMW18_011419	8270D	100-02-7	4-Nitrophenol	UJ
RMW18_011419	8270D	77-47-4	Hexachlorocyclopentadiene	UJ
RMW22_011419	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW22_011419	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW22_011419	8151A	93-76-5	2,4,5-T	UJ
RMW22_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
RMW22_011419	8260C	123-91-1	1,4-Dioxane	UJ
RMW22_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW22_011419	8260C	74-83-9	Bromomethane	UJ
RMW22_011419	8260C	74-87-3	Chloromethane	UJ
RMW22_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW22_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW22_011419	8270D	95-94-3	1,2,4,5-Tetrachlorobenzene	UJ
RMW22_011419	8270D	100-02-7	4-Nitrophenol	UJ
RMW22_011419	8270D	77-47-4	Hexachlorocyclopentadiene	UJ
RMW22_011419	537(M)	27619-97-2	6:2FTS	U (1.8)
RMW22_011419	537(M)	1763-23-1	Perfluorooctanesulfonic Acid	J
GWFB01_011419	537(M)	27619-97-2	6:2FTS	U (1.77)
GWTB01_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
GWTB01_011419	8260C	123-91-1	1,4-Dioxane	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
GWTB01_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWTB01_011419	8260C	74-83-9	Bromomethane	UJ
GWTB01_011419	8260C	74-87-3	Chloromethane	UJ
GWTB01_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWTB01_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW18_011419	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW18_011419	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW18_011419	8151A	93-76-5	2,4,5-T	UJ
RMW18_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
RMW18_011419	8260C	123-91-1	1,4-Dioxane	UJ
RMW18_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW18_011419	8260C	74-83-9	Bromomethane	UJ
RMW18_011419	8260C	74-87-3	Chloromethane	UJ
RMW18_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW18_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW18_011419	8270D	95-94-3	1,2,4,5-Tetrachlorobenzene	UJ
RMW18_011419	8270D	100-02-7	4-Nitrophenol	UJ
RMW18_011419	8270D	77-47-4	Hexachlorocyclopentadiene	UJ
RMW22_011419	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW22_011419	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW22_011419	8151A	93-76-5	2,4,5-T	UJ
RMW22_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
RMW22_011419	8260C	123-91-1	1,4-Dioxane	UJ
RMW22_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW22_011419	8260C	74-83-9	Bromomethane	UJ
RMW22_011419	8260C	74-87-3	Chloromethane	UJ
RMW22_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW22_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW22_011419	8270D	95-94-3	1,2,4,5-Tetrachlorobenzene	UJ
RMW22_011419	8270D	100-02-7	4-Nitrophenol	UJ
RMW22_011419	8270D	77-47-4	Hexachlorocyclopentadiene	UJ
RMW22_011419	537(M)	27619-97-2	6:2FTS	U (1.8)
RMW22_011419	537(M)	1763-23-1	Perfluorooctanesulfonic Acid	J
GWFB01_011419	537(M)	27619-97-2	6:2FTS	U (1.77)
GWTB01_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
GWTB01_011419	8260C	123-91-1	1,4-Dioxane	UJ
GWTB01_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWTB01_011419	8260C	74-83-9	Bromomethane	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
GWTB01_011419	8260C	74-87-3	Chloromethane	UJ
GWTB01_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWTB01_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW03_011519	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW03_011519	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW03_011519	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW03_011519	6020B	7440-28-0	Thallium, Dissolved	U (0.0005)
RMW03_011519	8081B	8001-35-2	Toxaphene	UJ
RMW03_011519	8151A	93-76-5	2,4,5-T	UJ
RMW03_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW03_011519	8260C	74-83-9	Bromomethane	UJ
RMW03_011519	8260C	74-87-3	Chloromethane	UJ
RMW03_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW03_011519	8260C	75-01-4	Vinyl chloride	UJ
RMW03_011519	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW03_011519	8270D	91-94-1	3,3'-Dichlorobenzidine	UJ
RMW03_011519	8270D	106-47-8	4-Chloroaniline	UJ
RMW03_011519	8270D	85-68-7	Butyl benzyl phthalate	UJ
RMW03_011519	8270D SIM	87-86-5	Pentachlorophenol	U (0.8)
RMW04_011519	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW04_011519	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW04_011519	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW04_011519	6020B	7440-28-0	Thallium, Dissolved	U (0.0005)
RMW04_011519	6020B	7440-28-0	Thallium, Total	U (0.0005)
RMW04_011519	7470A	7439-97-6	Mercury, Dissolved	UJ
RMW04_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW04_011519	8260C	74-83-9	Bromomethane	UJ
RMW04_011519	8260C	74-87-3	Chloromethane	UJ
RMW04_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW04_011519	8260C	75-01-4	Vinyl chloride	UJ
RMW04_011519	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW04_011519	8270D	91-94-1	3,3'-Dichlorobenzidine	UJ
RMW04_011519	8270D	106-47-8	4-Chloroaniline	UJ
RMW04_011519	8270D	85-68-7	Butyl benzyl phthalate	UJ
RMW05_011519	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW05_011519	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW05_011519	8081B	8001-35-2	Toxaphene	UJ
RMW05_011519	8151A	93-76-5	2,4,5-T	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RMW05_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW05_011519	8260C	74-83-9	Bromomethane	UJ
RMW05_011519	8260C	74-87-3	Chloromethane	UJ
RMW05_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW05_011519	8260C	75-01-4	Vinyl chloride	UJ
RMW05_011519	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW05_011519	8270D	91-94-1	3,3'-Dichlorobenzidine	UJ
RMW05_011519	8270D	106-47-8	4-Chloroaniline	UJ
RMW05_011519	8270D	85-68-7	Butyl benzyl phthalate	UJ
RMW05_011519	8270D SIM	87-86-5	Pentachlorophenol	U (0.8)
GWDUP01_011519	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
GWDUP01_011519	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
GWDUP01_011519	8081B	8001-35-2	Toxaphene	UJ
GWDUP01_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWDUP01_011519	8260C	74-83-9	Bromomethane	UJ
GWDUP01_011519	8260C	74-87-3	Chloromethane	UJ
GWDUP01_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWDUP01_011519	8260C	75-01-4	Vinyl chloride	UJ
GWDUP01_011519	8270D	105-67-9	2,4-Dimethylphenol	UJ
GWDUP01_011519	8270D	91-94-1	3,3'-Dichlorobenzidine	UJ
GWDUP01_011519	8270D	106-47-8	4-Chloroaniline	UJ
GWDUP01_011519	8270D	85-68-7	Butyl benzyl phthalate	UJ
GWDUP01_011519	8270D SIM	87-86-5	Pentachlorophenol	U (0.8)
GWTB02_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWTB02_011519	8260C	74-83-9	Bromomethane	UJ
GWTB02_011519	8260C	74-87-3	Chloromethane	UJ
GWTB02_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWTB02_011519	8260C	75-01-4	Vinyl chloride	UJ
RMW03_011519	8270D SIM	91-57-6	2-Methylnaphthalene	UJ
GWDUP01_011519	8270D SIM	91-57-6	2-Methylnaphthalene	J
RMW03_011519	8270D SIM	50-32-8	Benzo(a)pyrene	J
GWDUP01_011519	8270D SIM	50-32-8	Benzo(a)pyrene	J
RMW03_011519	9012B	57-12-5	Cyanide, Total	J
GWDUP01_011519	9012B	57-12-5	Cyanide, Total	J
RMW01_011619	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW01_011619	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW01_011619	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW01_011619	8260C	594-20-7	2,2-Dichloropropane	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RMW01_011619	8260C	74-83-9	Bromomethane	UJ
RMW01_011619	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW01_011619	8270D	95-95-4	2,4,5-Trichlorophenol	UJ
RMW01_011619	8270D	88-06-2	2,4,6-Trichlorophenol	UJ
RMW01_011619	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW01_011619	8270D	606-20-2	2,6-Dinitrotoluene	UJ
RMW01_011619	8270D	106-47-8	4-Chloroaniline	UJ
RMW01_011619	8270D	65-85-0	Benzoic Acid	UJ
RMW01_011619	8270D	131-11-3	Dimethyl phthalate	UJ
RMW07_011619	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW07_011619	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW07_011619	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW07_011619	6020B	7439-89-6	Iron, Dissolved	U (0.05)
RMW07_011619	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW07_011619	8260C	74-83-9	Bromomethane	UJ
RMW07_011619	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW07_011619	8270D	95-95-4	2,4,5-Trichlorophenol	UJ
RMW07_011619	8270D	88-06-2	2,4,6-Trichlorophenol	UJ
RMW07_011619	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW07_011619	8270D	606-20-2	2,6-Dinitrotoluene	UJ
RMW07_011619	8270D	106-47-8	4-Chloroaniline	UJ
RMW07_011619	8270D	65-85-0	Benzoic Acid	UJ
RMW07_011619	8270D	131-11-3	Dimethyl phthalate	UJ
RMW07_011619	537(M)	27619-97-2	6:2FTS	U (1.82)
RMW09_011619	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW09_011619	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW09_011619	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW09_011619	8260C	123-91-1	1,4-Dioxane	UJ
RMW09_011619	8260C	74-83-9	Bromomethane	UJ
RMW09_011619	8260C	87-68-3	Hexachlorobutadiene	UJ
RMW09_011619	8270D	95-95-4	2,4,5-Trichlorophenol	UJ
RMW09_011619	8270D	88-06-2	2,4,6-Trichlorophenol	UJ
RMW09_011619	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW09_011619	8270D	606-20-2	2,6-Dinitrotoluene	UJ
RMW09_011619	8270D	106-47-8	4-Chloroaniline	UJ
RMW09_011619	8270D	65-85-0	Benzoic Acid	UJ
RMW09_011619	8270D	131-11-3	Dimethyl phthalate	UJ
RMW09_011619	537(M)	27619-97-2	6:2FTS	U (1.57)

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RMW09_011619	537(M)	2991-50-6	NEtFOSAA	U (2.07)
GWFB02_011619	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
GWFB02_011619	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
GWFB02_011619	6020B	7439-89-6	Iron, Dissolved	U (0.05)
GWFB02_011619	6020B	7439-89-6	Iron, Total	U (0.05)
GWFB02_011619	8260C	75-35-4	1,1-Dichloroethene	UJ
GWFB02_011619	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWFB02_011619	8260C	74-83-9	Bromomethane	UJ
GWFB02_011619	8260C	74-87-3	Chloromethane	UJ
GWFB02_011619	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWFB02_011619	8260C	75-01-4	Vinyl chloride	UJ
GWFB02_011619	8270D	95-95-4	2,4,5-Trichlorophenol	UJ
GWFB02_011619	8270D	88-06-2	2,4,6-Trichlorophenol	UJ
GWFB02_011619	8270D	105-67-9	2,4-Dimethylphenol	UJ
GWFB02_011619	8270D	606-20-2	2,6-Dinitrotoluene	UJ
GWFB02_011619	8270D	106-47-8	4-Chloroaniline	UJ
GWFB02_011619	8270D	65-85-0	Benzoic Acid	UJ
GWFB02_011619	8270D	131-11-3	Dimethyl phthalate	UJ
GWFB02_011619	537(M)	27619-97-2	6:2FTS	J
GWTB03_011619	8260C	75-35-4	1,1-Dichloroethene	UJ
GWTB03_011619	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWTB03_011619	8260C	74-83-9	Bromomethane	UJ
GWTB03_011619	8260C	74-87-3	Chloromethane	UJ
GWTB03_011619	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWTB03_011619	8260C	75-01-4	Vinyl chloride	UJ
RMW10_011719	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW10_011719	8081B	8001-35-2	Toxaphene	UJ
RMW10_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	J
RMW10_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW10_011719	8270D SIM	208-96-8	Acenaphthylene	J
RMW11_011719	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW11_011719	8081B	8001-35-2	Toxaphene	UJ
RMW11_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	J
RMW11_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW11_011719	8270D SIM	208-96-8	Acenaphthylene	J
RMW14_011719	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW14_011719	8081B	8001-35-2	Toxaphene	UJ
RMW14_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	J

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RMW14_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW14_011719	8270D SIM	208-96-8	Acenaphthylene	J
RMW16_011719	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW16_011719	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW16_011719	8081B	8001-35-2	Toxaphene	UJ
RMW16_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	UJ
RMW16_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW16_011719	8270D SIM	208-96-8	Acenaphthylene	UJ
RMW17_011719	8081B	8001-35-2	Toxaphene	UJ
RMW17_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	UJ
RMW17_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW17_011719	8270D SIM	208-96-8	Acenaphthylene	J
GWTB04_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	UJ
GWTB04_011719	8260C	594-20-7	2,2-Dichloropropane	UJ

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1901689

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) WG1198696-3/4 exhibited a percent recovery or relative percent difference (RPD) outside of the control limits for chloromethane (54% LCS/55% LCSD), bromomethane (29% LCSD; 39% RPD), and 4-methyl-2-pentanone (22% RPD). The associated results for samples RMW18_011419, RMW22_011419, and GWTB01_011419 are qualified as "UJ" based on potential low and indeterminate bias.

The initial calibration (ICAL) for instrument VOA122 exhibited an average RF below the control limit for 1,4-dioxane (0.001). The associated results for samples RMW18_011419, RMW22_011419, and GWTB01_011419 are qualified as "UJ" based on potential low bias.

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The continuing calibration verification (CCV) for instrument VOA122 on 1/17/19 at 7:21 exhibited a percent difference above the control limit for dichlorodifluoromethane (43.6%), chloromethane (46.2%), vinyl chloride (25.6%), bromomethane (57%), and 1,1-dichloroethene (21.6%). The associated results for samples RMW18_011419, RMW22_011419, and GWTB01_011419 are qualified as "UJ" due to potential indeterminate bias. The chloromethane and bromomethane results were previously qualified based on the LCS/LCSD recoveries.

L1901865

The LCS/LCSD WG1198696-3/4 exhibited a percent difference below the control limit or an RPD above the control limit for chloromethane (54%/55%), bromomethane (29% LCSD; 39% RPD), and 4-methyl-2-pentanone (22% RPD). The associated results for samples RMW03_011519, RMW04_011519, RMW05_011519, GWDUP01_011519, and GWTB02_011519 are qualified as "UJ" based on potential low or indeterminate bias.

The CCV for instrument VOA122 exhibited a percent difference above the control limit for dichlorodifluoromethane (43.6%), chloromethane (46.2%), vinyl chloride (25.6%), bromomethane (57%), and 1,1-dichloroethene (21.6%). The associated results for samples RMW03_011519, RMW04_011519, RMW05_011519, GWDUP01_011519, and GWTB02_011519 are qualified as "UJ" based on potential low bias. The chloromethane and bromomethane results were previously qualified based on the LCS/LCSD recoveries.

L1902070

The LCS/LCSD WG1198696-3/4 exhibited a percent difference below the control limit or RPD above the control limit for chloromethane (54%/55%), bromomethane (29% LCSD; 39% RPD), and 4-methyl-2-pentanone (22% RPD). The associated results for samples GWFB02_011619 and GWTB03_011619 are qualified as "UJ" based on potential low or indeterminate bias.

The LCS/LCSD WG1198987-3/4 exhibited a percent difference below the control limit for 2,2-dichloropropane (62%). The associated results for samples RMW01_011619 and RMW07_011619 are qualified as "UJ" based on potential indeterminate bias.

The LCS/LCSD WG119885-3/4 exhibited a percent difference below the control limit for bromomethane (32%/36%) and a RPD above the control limit for 1,4-dioxane (36% RPD). The associated results for sample RMW09_011619 are qualified as "UJ" based on potential low and indeterminate bias, respectively.

The initial calibration verification (ICV) for instrument ELAINE exhibited a percent difference above the control limit for dichlorodifluoromethane (-47.4%). The associated results for samples

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RMW01_011619 and RMW07_011619 are qualified as "UJ" based on potential indeterminate bias.

The CCV for instrument VOA122 on 1/17/19 at 7:21 exhibited a percent difference above the control limit for dichlorodifluoromethane (43.6%), chloromethane (46.2%), vinyl chloride (25.6%), bromomethane (57%), and 1,1-dichloroethene (21.6%). The associated results for samples GWFB02_011619 and GWTB03_011619 are qualified as "UJ" based on potential indeterminate bias. The associated chloromethane and bromomethane results were previously qualified based on LCS/LCSD recoveries.

The CCV for instrument ELAINE on 1/18/19 at 10:34 exhibited a percent difference for bromomethane (48.6%) and 2,2-dichloropropane (34.1%). The associated bromomethane results for samples RMW01_011619 and RMW07_011619 are qualified as "UJ" based on potential indeterminate bias. The 2,2-dichloropropane results were previously qualified based on the LCS/LCSD recoveries.

The CCV for instrument VOA122 on 1/21/18 at 8:17 exhibited a percent recovery above the control limit for 1,4-dioxane (34.6%) and hexachlorobutadiene (29.4%). The associated hexachlorobutadiene result for sample RMW09_011619 is qualified as "UJ" based on potential indeterminate bias. The 1,4-dioxane result was previously qualified based on the LCS/LCSD recoveries.

L1902340

The LCSD WG1199942-4 exhibited a percent recovery below the control limit for 1,2,4,5-tetramethylbenzene (60%). The associated results for samples RMW10_011719, RMW11_011719, RMW14_011719, RMW16_011719, RMW17_011719, and GWTB04_011719 are qualified as "J" or "UJ" based on potential low bias.

The CCV for instrument VOA108 on 1/22/2019 at 9:46 exhibited a percent difference above the control limit for 2,2-dichloropropane (27.2%). The associated results for samples RMW10_011719, RMW11_011719, RMW14_011719, RMW16_011719, RMW17_011719, and GWTB04_011719 are qualified as "UJ" based on potential indeterminate bias.

SVOCs by SW-846 Methods 8270D and 8270D SIM:

L1901689

The LCS/LCSD WG1197576-2/3 exhibited a percent recovery or RPD above the control limit for hexachlorocyclopentadiene (31% RPD), 1,2,4,5-tetrachlorobenzene (32% RPD), and 4-

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nitrophenol (86%/89% LCS/LCSD). The associated results for samples RMW18_011419 and RMW22_011419 are qualified as "UJ" based on potential indeterminate bias.

L1901865

The LCS/LCSD WG1198362-2/3 exhibited a percent difference above the control limit for 3,3'-dichlorobenzidine (49% RPD), 4-chloroaniline (41% RPD), and 2,4-dimethylphenol (29% LCS, 92% RPD). The associated results for samples RMW03_011519, RMW04_011519, RMW05_011519, and GWDUP01_011519 are qualified as "UJ" based on potential indeterminate bias.

The CCV for instrument SV107 on 1/18/19 at 9:48 exhibited a percent difference above the control limit for benzyl butyl phthalate (-20.2%). The associated results for samples RMW03_011519, RMW04_011519, RMW05_011519, and GWDUP01_011519 are qualified as "UJ" based on potential indeterminate bias.

The method blank WG1168363-1 exhibited a detection of pentachlorophenol (0.18 ug/l). The associated result for samples RMW03_011519, RMW05_011519, and GWDUP01_011519 are qualified as "U" at the reporting limit due to potential high bias.

L1902070

The LCS/LCSD WG1198691-2/3 exhibited a percent difference or RPD outside of the control limits for 4-chloroaniline (38% RPD) and 2,4-dimethylphenol (10%/29% LCS/LCSD; 97% RPD). The associated results for samples RMW01_011619, RMW07_011619, RMW09_011619, and GWFB02_011619 are qualified as "UJ" based on potential indeterminate bias.

The CCV for instrument SV107 on 1/19/19 at 7:24 exhibited a percent difference above the control limit for benzoic acid (-21.2%), 2,4,6-trichlorophenol (-21.5%), 2,4,5-trichlorophenol (-25.7%), dimethyl phthalate (-25.8%), and 2,6-dinitrotoluene (-27.4%). The associated results for samples RMW01_011619, RMW07_011619, RMW09_011619, and GWFB02_011619 are qualified as "UJ" based on potential indeterminate bias.

L1902340

The CCV for instrument SV119 on 1/22/19 at 9:35 exhibited a percent difference above the control limit for acenaphthylene (-20.9%). The associated results for samples RMW10_011719, RMW11_011719, RMW14_011719, RMW16_011719, and RMW17_011719 are qualified as "J" or "UJ" based on potential indeterminate bias.

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PFAS by EPA Method 537:

L1901689

The method blank WG1198461-1 exhibited a detection of 6:2FTS at a concentration of 1.28 ng/l. The associated detections for samples GWFB01_011419 and RMW22_011419 are qualified as "U" at the reporting limit due to potential high bias.

The field blank sample GWFB01_011419 exhibited a detection of 6:2FTS (1.05 ng/l) and perfluorooctanesulfonic acid (0.972 ng/l). The detections in the field blank sample are greater than 1/3 of the reporting limit, the associated perfluorooctanesulfonic acid result is qualified as "J" for sample RMW22_011419 due to potential high bias. The 6:2FTS result was previously qualified based on the method blank contamination.

L1902070

The method blank WG1198461-1 exhibited a detection of 6:2FTS at 1.28 ng/l. The associated results for samples RMW07_011619 and RMW09_011619 are qualified as "U" at the reporting limit and sample GWFB02_011619 is qualified as "J" due to potential high bias.

The field blank sample GWFB02_011619 exhibited a detection of 6:2FTS (2.08 ng/l), n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) (0.428 ng/l), and n-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) (0.6950 ng/l). The associated NEtFOSAA result for sample RMW09_011619 is qualified as "U" at the reporting limit due to potential high bias. The additional results were non-detects or were previously qualified based on the method blank contamination.

Herbicides by SW-846 Method 8151A:

L1901689

The CCV for instrument PEST17 on 1/18/19 at 16:03 exhibited a percent difference above the control limit for 2,4,5-T (-26.8%). The associated results for samples RMW18_011419 and RMW22_011419 are qualified as "UJ" based on potential indeterminate bias.

L1901865

The CCV for instrument PEST17 on 1/19/19 at 13:19 exhibited a percent difference above the control limit for 2,4,5-T (-25.8%). The associated results for samples RMW03_011519 and RMW05_011519 are qualified as "UJ" based on potential indeterminate bias.

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Pesticides by SW-846 Method 8081B:

L1901865

The CCV for instrument PEST10 on 1/21/19 at 18:51 exhibited a percent difference above the control limit for toxaphene. The associated results for samples RMW03_011519, RMW05_011519, and GWDUP01_011519 are qualified as "UJ" based on potential indeterminate bias.

L1902340

The CCV for instrument PEST20 on 1/22/19 at 10:11 exhibited a percent difference above the control limit for toxaphene. The associated results for samples RMW10_011719, RMW11_011719, RMW14_011719, RMW16_011719, and RMW17_011719 are qualified as "UJ" based on potential indeterminate bias.

Metals by SW-846 Methods 6010D:

L1901689

The method blank sample WG1197826-1 exhibited a detection of dissolved antimony (0.00056 mg/l), dissolved iron (0.0443 mg/l), and dissolved manganese (0.00122 mg/l). The associated antimony results for samples RMW18_011419 and RMW22_011419 are qualified as "U" at the reporting limit due to potential high bias. The additional results were reported above the reporting limit and no qualification is necessary.

The method blank sample WG1197906-1 exhibited detections of antimony (0.00063 mg/l), chromium (0.00025 mg/l), and iron (0.0294 mg/l). The associated antimony results for samples RMW18_011419 and RMW22_011419 are qualified as "U" at the reporting limit due to potential high bias. The additional results were reported above the reporting limit and no qualification is necessary.

L1901865

The method blank WG1198261-1 exhibited a detection of dissolved chromium (0.0022 mg/l), dissolved iron (0.0328 mg/l), and dissolved sodium (0.0384 mg/l). The associated dissolved chromium results for samples RMW03_011519, RMW04_011519, and GWDUP01_011519 are qualified as "U" at the reporting limit due to potential high bias. The additional analytes were detected above the reporting limit in the associated samples; no qualification is necessary.

The method blank WG1198177-1 exhibited a detection of antimony (0.00045 mg/l), calcium (0.0394 mg/l), and sodium (0.0432 mg/l). The associated total antimony results for samples RMW03_011519, RMW04_011519, and RMW05_011519 are qualified as "U" at the reporting

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limit due to potential high bias. The additional analytes were detected above the reporting limit in the associated samples; no qualification is necessary.

The continuing calibration blank (CCB) R1150350-12 exhibited detections of dissolved antimony (0.872 ug/l), dissolved iron (19.5 ug/l), dissolved sodium (38.3 ug/l) and dissolved thallium (0.145 ug/l). The associated dissolved antimony results for samples RMW03_011519, RMW04_011519, RMW05_011519, and GWDUP01_011519 and the associated dissolved thallium results for samples RMW03_011519 and RMW04_011519 are qualified as "U" at the reporting limit due to potential high bias. The additional results were above the associated reporting limits and no qualification is necessary.

The CCB R1150350-12 exhibited detections of total antimony (0.872 ug/l), total iron (19.5 ug/l), total sodium (38.3 ug/l) and total thallium (0.145 ug/l). The associated total thallium result for sample RMW04_011519 is qualified as "U" at the reporting limit due to potential high bias. The additional results were above the associated reporting limits and no qualification is necessary.

L1902070

The method blank WG1198536-1 exhibited detections of dissolved antimony (0.00054 mg/l), dissolved chromium (0.00037 mg/l), dissolved iron (0.0411 mg/L), dissolved sodium (0.0323 mg/l) and dissolved thallium (0.00015 mg/l). The associated detections below the reporting limit for samples RMW01_011619, RMW07_011619, RMW09_011619, and GWFB02_011619 are qualified as "U" at the reporting limit for dissolved metals; antimony, chromium, iron, and thallium.

The method blank WG1198566-1 exhibited detections of total antimony (0.0052 mg/l) and total iron (0.0360 mg/l). The associated total antimony results for samples RMW01_011619, RMW07_011619, RMW09_011619 and the total thallium result for sample GWFB02_011619 are qualified as "U" at the reporting limit due to potential high bias.

L1902340

The method blank WG1198950-1 exhibited detections of total antimony (0.00048 mg/l) and total iron (0.0250 mg/l). The associated total antimony result for sample RMW16_011719 is qualified as "U" at the reporting limit due to potential high bias. The additional results were above the reporting limit for non-detects; no qualification is necessary.

The method blank WG1198915-1 exhibited detections of dissolved antimony (0.00059 mg/l), dissolved iron (0.0260 mg/l), and dissolved sodium (0.0319 mg/l). The associated dissolved antimony results for samples RMW10_011719, RMW11_011719, RMW14_011719, and

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RMW16_011719 are qualified as "U" at the reporting limit due to potential high bias. The additional results were above the reporting limit for non-detects; no qualification is necessary.

Mercury by SW-846 Method 7470A:

L1901865

The matrix spike/matrix spike duplicate (MS/MSD) WG1198576-3/4 exhibited a percent recovery and RPD outside of the control limits for dissolved mercury (56% MSD; 39% RPD). The associated results for the parent sample, RMW04_011519 qualified as "UJ" based on potential low bias.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1901689

The ICV for instrument VOA1222 exhibited a percent difference above the control limit for bromomethane (-30.4%). The associated results were previously qualified based on the LCS/LCSD percent recovery.

L1901865

The MS/MSD WG1198696-6/7 exhibited a percent recovery above the control limit for chloromethane (51%/48%), bromomethane (12%/12%), and trans-1,4-dichloro-2-butene (66%/58%); no qualification is necessary.

The ICV for instrument VOA122 exhibited a percent difference above the control limit for bromomethane (-30.4%). The associated results were previously qualified based on the LCS/LCSD recoveries.

L1902070

The ICV for instrument VOA122 exhibited a percent difference above the control limit for bromomethane (-30.4%). The associated results were previously qualified based on the LCS/LCSD percent recoveries.

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SVOCs by SW-846 Methods 8270D SIM:

L1901865

The MS/MSD WG1198362-4/5 exhibited a percent difference outside of the control limit for 3,3'-dichlorobenzidine (18%/19%); no qualification is necessary.

L1902070

The surrogate 2,4,6-tribromophenol was recovered above the control limit at 132% for sample RMW09_011619. The additional acid extractible surrogates were recovered within the appropriate range; no qualification is necessary.

Pesticides by SW-846 Method 8081B:

L1901865

The surrogates 2,4,5,6-tetrachloro-m-xylene and decachlorobiphenyl were not recovered (i.e. 0% recovery) for sample RMW05_011519. The sample was diluted by a factor of 50X; no qualification is necessary.

PFAS by EPA Method 537:

L1901689

The isotope dilution standard perfluoro(1,2-¹³C₂)tetradecanoic acid was recovered above the control limit at 155% for sample GWFB01. The associated target analyte result for sample GWFB01 is a non-detect; no qualification is necessary.

L1902070

The isotope dilution standard 1H,1H,2H,2H-perfluoro(1,2-¹³C₂)decanesulfonic acid (M2-8:FTS) was recovered above the control limit at 191% for sample RMW09_011619. The associated target analyte result for sample RMW09_011619 is a non-detect; no qualification is necessary.

Metals by SW-846 Methods 6010D:

L1901689

The MS WG1197826-1 (parent sample RMW18_011419) exhibited a percent recovery below the control limit for dissolved calcium (40%) and dissolved sodium (64%). The associated post digestion spike recoveries are within the acceptable ranges; no qualification is necessary.

The MS WG1197906-3 (parent sample RMW18_011419) exhibited a percent recovery below the control limit for total calcium (30%) and total iron (0%). The associated post digestion spike recoveries are within the acceptable range; no qualification is necessary.

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L1901865

The MS/MSD WG1198261-3/4 exhibited a percent recovery above the control limit for dissolved calcium (320%/510%), dissolved iron (141%/185%), dissolved magnesium (161%/182%), dissolved potassium (137% MSD), and dissolved sodium (310%/370%). The sample concentration is greater than 4X the spike concentration added for calcium, iron, magnesium, and sodium; no qualification is necessary.

The MS/MSD WG1198177-3/4 exhibited a percent recovery above the control limit for calcium (250%/310%), iron (151%/161%), magnesium (152%/168%), and sodium (290%/310%). Parent sample -02; sample concentration greater than 4x the spike for calcium, iron, magnesium, and sodium. Calcium (130%) and sodium (136%) out of range for post digestion spike; no qualification is necessary.

L1902070

The MS WG1198536-3 (-01) percent recovery outside of the control limits for dissolved metals calcium (240%), magnesium (134%), selenium (35%), and sodium (270%). The sample concentration was greater than 4X the spike concentration for calcium, magnesium, and sodium. The post digestion spike was within the acceptable range for selenium; no qualification is necessary.

The MS WG1198566-3 exhibited a percent recovery above the control limit for total metals; iron (130%), magnesium (200%), and sodium (130%). The associated parent sample is not a site specific sample; no qualification is necessary.

The laboratory duplicate WG1198566-4 and associated parent sample exhibited a RPD above the control limit for total nickel (26%). The parent sample is not a site specific sample; no qualification is necessary.

L1902340

The MS WG1198950-3 exhibited a percent recovery below the control limit for the total metals calcium (0%), magnesium (0%), and sodium (0%). The sample concentration was greater than 4X the spike concentration and the associated parent sample was not a site specific sample; no qualification is necessary.

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Mercury by SW-846 Method 7470A:

L1902070

The MS/MSD WG1198576-3/4 exhibited a percent recovery below the control limit (56% MSD) and an RPD above the control limit (39%). The associated parent sample was not a site specific sample; no qualification is necessary.

L1902340

The method blank WG1199430-1 exhibited a detection at a concentration of dissolved mercury 0.00008 mg/l. The associated results are non-detects; no qualifications are necessary

COMMENTS:

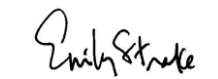
Field duplicate and parent sample pairs were collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 1X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 30% for groundwater. The following analytes did not meet the precision criteria:

- RMW03_011519 and GWDUP01_011519: 2-methylnaphthalene, benzo(a)pyrene, and total cyanide.

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 28, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Groundwater Samples Collected in September 2017
Langan Project No.: 170487003

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of groundwater samples collected in September 2017 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the Site") in Bronx, NY. The samples were analyzed by Alpha Analytical Laboratories of Westborough, MA (NYSDOH ELAP registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCB), and total and dissolved metals including mercury (Hg) by the analytical methods listed below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Methods 8270D and 8270C SIM
- PCBs by SW-846 Method 8082A
- Total and Dissolved Metals by SW-846 Method 6020A
- Total and Dissolved Hg by SW-846 Method 7470A

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

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TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1731603	L1731603-01	FB02_090717	9/7/2017	VOCs, SVOCs, Metals, Hg
L1731603	L1731603-06	MW01_090717	9/7/2017	VOCs, SVOCs, Metals, Hg
L1731603	L1731603-07	TB03_090717	9/7/2017	VOCs
L1731603	L1731603-08	MW01_090717 (LAB FILTER)	9/7/2017	VOCs, SVOCs, Metals, Hg
L1731771	L1731771-01	MW08_090817	9/8/2017	VOCs, SVOCs, Metals, Hg, PCBs
L1731771	L1731771-02	MW06_090817	9/8/2017	VOCs, SVOCs, Metals, Hg, PCBs
L1731771	L1731771-03	FB03_090817	9/8/2017	VOCs, SVOCs, Metals, Hg, PCBs
L1731771	L1731771-04	TB03_090817	9/8/2017	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-3b, "ICP-MS Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and Cyanide Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, serial dilutions, dual column performance, field duplicate, and trip blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

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- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION:

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
FB02_090717	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
FB02_090717	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
FB02_090717	8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
FB02_090717	8260C	123-91-1	1,4-DIOXANE	UJ
FB02_090717	8260C	591-78-6	2-HEXANONE	UJ
FB02_090717	8270D	88-75-5	2-NITROPHENOL	UJ
FB02_090717	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
FB02_090717	8270D	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	UJ
FB02_090717	8260C	74-83-9	BROMOMETHANE	UJ
FB02_090717	8260C	75-00-3	CHLOROETHANE	UJ
FB02_090717	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.001)
FB02_090717	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB02_090717	8260C	91-20-3	NAPHTHALENE	UJ
FB02_090717	8260C	127-18-4	TETRACHLOROETHENE	UJ
FB02_090717	8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
FB02_090717	8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
MW01_090717	8260C	630-20-6	1,1,1,2-TETRACHLOROETHANE	UJ
MW01_090717	8260C	71-55-6	1,1,1-TRICHLOROETHANE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
MW01_090717	8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
MW01_090717	8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
MW01_090717	8270D	88-75-5	2-NITROPHENOL	UJ
MW01_090717	8260C	67-64-1	ACETONE	UJ
MW01_090717	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
MW01_090717	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
MW01_090717	8260C	75-27-4	BROMODICHLOROMETHANE	UJ
MW01_090717	8260C	75-25-2	BROMOFORM	UJ
MW01_090717	8260C	74-83-9	BROMOMETHANE	UJ
MW01_090717	8260C	56-23-5	CARBON TETRACHLORIDE	UJ
MW01_090717	6020A	7440-50-8	COPPER, DISSOLVED	J
MW01_090717	8260C	87-68-3	HEXACHLOROBUTADIENE	UJ
MW01_090717	8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
MW01_090717	8260C	127-18-4	TETRACHLOROETHENE	J
MW01_090717	8260C	10061-02-6	TRANS-1,3-DICHLOROPROPENE	UJ
MW01_090717	8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
MW01_090717 (LAB FILTER)	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
TB03_090717	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
TB03_090717	8260C	123-91-1	1,4-DIOXANE	UJ
TB03_090717	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB03_090817	8260C	75-34-3	1,1-DICHLOROETHANE	UJ
FB03_090817	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
FB03_090817	8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
FB03_090817	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
FB03_090817	8260C	123-91-1	1,4-DIOXANE	UJ
FB03_090817	6020A	7429-90-5	ALUMINUM, TOTAL	U (0.01)
FB03_090817	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
FB03_090817	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
FB03_090817	6020A	7440-39-3	BARIUM, TOTAL	U (0.003)
FB03_090817	8270DSIM	50-32-8	BENZO(A)PYRENE	UJ
FB03_090817	8270DSIM	205-99-2	BENZO(B)FLUORANTHENE	UJ
FB03_090817	8270D	65-85-0	BENZOIC ACID	UJ
FB03_090817	8260C	74-83-9	BROMOMETHANE	UJ
FB03_090817	6020A	7440-70-2	CALCIUM, DISSOLVED	J
FB03_090817	8260C	75-15-0	CARBON DISULFIDE	UJ
FB03_090817	8260C	74-87-3	CHLOROMETHANE	UJ
FB03_090817	6020A	7440-47-3	CHROMIUM, DISSOLVED	U (0.001)

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
FB03_090817	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.001)
FB03_090817	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB03_090817	8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
FB03_090817	8270DSIM	193-39-5	INDENO(1,2,3-CD)PYRENE	UJ
FB03_090817	8260C	91-20-3	NAPHTHALENE	UJ
FB03_090817	6020A	7440-02-0	NICKEL, TOTAL	U (0.002)
FB03_090817	8270DSIM	85-01-8	PHENANTHRENE	U (0.1)
FB03_090817	6020A	7440-23-5	SODIUM, TOTAL	UJ
FB03_090817	8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
FB03_090817	8260C	75-01-4	VINYL CHLORIDE	UJ
MW06_090817	8260C	79-34-5	1,1,2,2-TETRACHLOROETHANE	UJ
MW06_090817	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
MW06_090817	8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
MW06_090817	8260C	123-91-1	1,4-DIOXANE	UJ
MW06_090817	8260C	78-93-3	2-BUTANONE	UJ
MW06_090817	8260C	591-78-6	2-HEXANONE	UJ
MW06_090817	8270DSIM	83-32-9	ACENAPHTHENE	U (0.1)
MW06_090817	8260C	67-64-1	ACETONE	U (18)
MW06_090817	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
MW06_090817	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
MW06_090817	8270DSIM	50-32-8	BENZO(A)PYRENE	UJ
MW06_090817	8270DSIM	205-99-2	BENZO(B)FLUORANTHENE	J
MW06_090817	8270D	65-85-0	BENZOIC ACID	UJ
MW06_090817	6020A	7440-41-7	BERYLLIUM, TOTAL	U (0.00084)
MW06_090817	8260C	74-83-9	BROMOMETHANE	UJ
MW06_090817	6020A	7440-43-9	CADMIUM, TOTAL	U (0.0002)
MW06_090817	6020A	7440-70-2	CALCIUM, DISSOLVED	J
MW06_090817	6020A	7440-47-3	CHROMIUM, DISSOLVED	U (0.001)
MW06_090817	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
MW06_090817	8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
MW06_090817	8270DSIM	193-39-5	INDENO(1,2,3-CD)PYRENE	UJ
MW06_090817	8260C	91-20-3	NAPHTHALENE	J
MW06_090817	6020A	7440-02-0	NICKEL, DISSOLVED	U (0.013)
MW06_090817	8270DSIM	85-01-8	PHENANTHRENE	U (0.1)
MW06_090817	6020A	7440-23-5	SODIUM, TOTAL	J
MW08_090817	8260C	75-34-3	1,1-DICHLOROETHANE	UJ
MW08_090817	8260C	75-35-4	1,1-DICHLOROETHENE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
MW08_090817	8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
MW08_090817	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
MW08_090817	8260C	123-91-1	1,4-DIOXANE	UJ
MW08_090817	8270DSIM	83-32-9	ACENAPHTHENE	U (0.31)
MW08_090817	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
MW08_090817	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
MW08_090817	6020A	7440-38-2	ARSENIC, TOTAL	U (0.00099)
MW08_090817	6020A	7440-39-3	BARIUM, TOTAL	U (0.01548)
MW08_090817	8270D	65-85-0	BENZOIC ACID	UJ
MW08_090817	8260C	74-83-9	BROMOMETHANE	UJ
MW08_090817	6020A	7440-70-2	CALCIUM, DISSOLVED	J
MW08_090817	8260C	75-15-0	CARBON DISULFIDE	UJ
MW08_090817	8260C	74-87-3	CHLOROMETHANE	UJ
MW08_090817	6020A	7440-47-3	CHROMIUM, DISSOLVED	U (0.001)
MW08_090817	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.00496)
MW08_090817	6020A	7440-48-4	COBALT, TOTAL	U (0.001)
MW08_090817	6020A	7440-50-8	COPPER, DISSOLVED	U (0.0098)
MW08_090817	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
MW08_090817	8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
MW08_090817	6020A	7439-96-5	MANGANESE, TOTAL	J
MW08_090817	8270DSIM	91-20-3	NAPHTHALENE	U (0.24)
MW08_090817	8260C	91-20-3	NAPHTHALENE	UJ
MW08_090817	6020A	7440-02-0	NICKEL, DISSOLVED	U (0.002)
MW08_090817	6020A	7440-02-0	NICKEL, TOTAL	U (0.00467)
MW08_090817	8270DSIM	85-01-8	PHENANTHRENE	U (0.15)
MW08_090817	6020A	7440-23-5	SODIUM, TOTAL	J
MW08_090817	8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
MW08_090817	8260C	75-01-4	VINYL CHLORIDE	UJ
TB03_090817	8260C	75-34-3	1,1-DICHLOROETHANE	UJ
TB03_090817	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
TB03_090817	8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
TB03_090817	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
TB03_090817	8260C	123-91-1	1,4-DIOXANE	UJ
TB03_090817	8260C	74-83-9	BROMOMETHANE	UJ
TB03_090817	8260C	75-15-0	CARBON DISULFIDE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
TB03_090817	8260C	74-87-3	CHLOROMETHANE	UJ
TB03_090817	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
TB03_090817	8260C	91-20-3	NAPHTHALENE	UJ
TB03_090817	8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
TB03_090817	8260C	75-01-4	VINYL CHLORIDE	UJ

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731603:

The lab control sample and duplicate (LCS/LCSD) for batch WG1041014 exhibited percent recoveries below the lower control limit (LCL) for 1,1,1-trichloroethane (66%, 66%), 2,2-dichloropropane (57%, 57%), and carbon tetrachloride (60%, 57%). The associated results in sample MW01_090717 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1041384 exhibited a relative percent difference (RPD) above the control limit for 1,4-dioxane (22%). The associated results in sample TB03_090717 are qualified as "UJ" based on potential indeterminate bias.

The continuing calibration verification (CCV) analyzed on 9/12/2017 at 9:43 exhibited a percent difference (%D) above the control limit for dichlorodifluoromethane (33.5%), bromomethane (20.4%), chloroethane (26.3%), trichlorofluoromethane (23.2%), 1,1-dichloroethene (23%), trans-1,2-dichloroethene (20.8%), 1,4-dioxane (-28.1%), tetrachloroethene (21.3%), 2-hexanone (-22%), 1,2,3-trichloropropane (-20.1%), naphthalene (-34%), and 1,2,3-trichlorobenzene (-25.5%). The associated results in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 14:25 exhibited %D's above the control limit for bromomethane (24.4%), trichlorofluoromethane (28.9%), acetone (23.5%), methyl tert-butyl ether (21.8%), 2,2-dichloropropane (43.3%), carbon tetrachloride (40.2%), 1,1,1-trichloroethane

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(33.9%), bromodichloromethane (21%), tetrachloroethene (20.3%), trans-1,3-dichloropropene (26.5%), 1,1,1,2-tetrachloroethane (23%), bromoform (34%), 1,2-dibromo-3-chloropropane (34.6%), and hexachlorobutadiene (25.5%). The associated results in sample MW01_090717 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 8:18 exhibited %D's above the control limit for dichlorodifluoromethane (23.9%) and 1,1-dichloroethene (22.4%). The associated results in sample TB03_090717 are qualified as "UJ" based on potential indeterminate bias.

L1731771:

The trip blank (TB) (TB03_090817) exhibited a detection of acetone (2.5 ug/l). The associated results in sample MW06_090817 are qualified as "U" at the sample concentration based on potential blank contamination.

The LCS/LCSD for batch WG1041560 exhibited percent recoveries below the LCL for carbon disulfide (45%, 47%) and chloromethane (25%, 24%). The associated results in samples MW08_090817, FB03_090817, and TB03_090817 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1041740 exhibited RPD's above the control limit for naphthalene (49%) and 1,4-dioxane (24%). The associated results in sample MW06_090817 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 20:31 exhibited %D's above the control limit for dichlorodifluoromethane (48.3%), vinyl chloride (39%), bromomethane (45.3%), chloroethane (28.9%), 1,1-dichloroethene (31.4%), trans-1,2-dichloroethene (23.6%), 1,1-dichloroethane (23.1%), 1,1-dichloropropene (25.9%), 1,4-dioxane (-22.4%), and naphthalene (-27.2%), and 1,2,3-trichlorobenzene (-39.4%). The associated results in samples MW08_090817, FB03_090817, and TB03_090817 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/14/2017 at 7:15 exhibited %D's above the control limit for dichlorodifluoromethane (22.7%), bromomethane (54%), 1,1-dichloroethene (20.5%), 2-butanone (-20.5%), 2-hexanone (-22%), and 1,1,2,2-tetrachloroethane (-23.1%), and 1,2,3-trichloropropane (-25.1%). The associated results in sample MW06_090817 are qualified as "J" or "UJ" based on potential indeterminate bias.

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SVOCs by SW-846 Methods 8270D and 8270C SIM:

L1731603:

The CCV analyzed on 9/15/2017 at 7:39 exhibited a %D above the control limit for bis(2-ethylhexyl)phthalate (-20.7%). The associated results in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 9:23 exhibited a %D above the control limit for 2-nitrophenol (-23.4%). The associated results in samples FB02_090717 and MW01_090717 are qualified as "UJ" based on potential indeterminate bias.

L1731771:

The method blank (MB) for batch WG1040341 exhibited detections of acenaphthene (0.04 ug/l) and phenanthrene (0.06 ug/l). The associated results in samples MW08_090817 and MW06_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The field blank (FB) (FB03_090817) exhibited a detection of naphthalene (0.08 ug/l). The associated results in samples MW08_090817 and MW06_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The LCS for batch WG1040338 exhibited a percent recovery below the LCL for hexachlorocyclopentadiene (39%). The associated results in samples MW08_090817, MW06_090817, and FB03_090817 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1040338 exhibited a RPD above the control limit for benzoic acid (44%). The associated results in samples MW08_090817, MW06_090817, and FB03_090817 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/14/2017 at 7:34 exhibited %D's above the control limit for benzo(b)fluoranthene (-23.7%), and benzo(a)pyrene (-21.2%), and indeno(1,2,3-cd)pyrene (-22%). The associated results in samples MW06_090817 and FB03_090817 are qualified as "J" or "UJ" based on potential indeterminate bias.

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Metals by SW-846 Method 6020A:

L1731603:

The MB for batch WG1040748 exhibited a detection of antimony, total (0.00065 mg/l). The associated results in samples FB02_090717 and MW01_090717 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1040748 exhibited a detection of chromium, total (0.00068 mg/l). The associated results in sample FB02_090717 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1041736 exhibited a detection of antimony, dissolved (0.00052 mg/l). The associated results in sample MW01_090717 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1043235 exhibited a detection of antimony, dissolved (0.00135 mg/l). The associated results in sample MW01_090717 (filtered) are qualified as "U" at the reporting limit based on potential blank contamination.

The FB (FB02_090717) exhibited a detection of antimony, total (0.00049 mg/l). The associated results in sample MW01_090717 are qualified as "U" at the reporting limit based on potential blank contamination.

The matrix spike (MS) for batch WG1041736 exhibited a percent recovery above the upper control limit (UCL) for copper, dissolved (172%). The associated results in sample MW01_090717 are qualified as "J" based on potential high bias.

L1731771:

The MB for batch WG1041626 exhibited detections of antimony, dissolved (0.00137 mg/l) and chromium, dissolved (0.0006 mg/l). The associated results in samples MW08_090817, MW06_090817, and FB03_090817 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1041197 exhibited a detection of aluminum, total (0.00618 mg/l). The associated results in sample FB03_090817 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1041197 exhibited a detection of antimony, total (0.00137 mg/l). The associated results in samples MW08_090817, MW06_090817, and FB03_090818 are qualified as "U" at the reporting limit based on potential blank contamination.

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The MB for batch WG1041197 exhibited detections of arsenic, total (0.00021 mg/l) and cobalt, total (0.00059 mg/l). The associated results in sample MW08_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The MB for batch WG1041197 exhibited detections of barium, total (0.00179 mg/l), and chromium, total (0.00087 mg/l), and nickel, total (0.00115 mg/l). The associated results in samples MW08_090817 and FB03_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The MB for batch WG1041197 exhibited detections of beryllium, total (0.0004 mg/l) and cadmium, total (0.00017 mg/l). The associated results in sample MW06_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The FB (FB03_090817) exhibited a detection of nickel, dissolved (0.00301 mg/l). The associated results in samples MW08_090817 and MW06_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The FB (FB03_090817) exhibited a detection of copper, dissolved (0.00109 mg/l). The associated results in sample MW08_090817 are qualified as "U" at the sample concentration based on potential blank contamination.

The MS for batch WG1041197 exhibited a percent recovery below the LCL for sodium, total (51%). The associated results in samples MW08_090817, MW06_090817, and FB03_090817 are qualified as "J" or "UJ" based on potential low bias.

The serial dilution for sample MW08_090817 exhibited a %D above the control limit for manganese, total (22%). The associated result is qualified as "J" based on potential indeterminate bias.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731771:

The LCS/LCSD for batch WG1041560 exhibited a percent recovery above the UCL for 1,2,3-trichlorobenzene (140%, 140%). The associated results are non-detections. No qualification is necessary.

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SVOCs by SW-846 Methods 8270D and 8270C SIM:

L1731603:

The LCS/LCSD for batch WG1039521 exhibited a percent recovery above the UCL for p-chloro-m-cresol (100%, 113%). The associated results are non-detections. No qualification is necessary.

L1731771:

The FB (FB03_090817) exhibited detections of naphthalene (0.08 ug/l) and phenanthrene (0.02 ug/l). The associated results were previously qualified. No further action is necessary.

Metals by SW-846 Method 6020A:

L1731603:

The MB for batch WG1041736 exhibited a detection of chromium, dissolved (0.00045 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The TB (TB03_090717) exhibited a detection of acetone (1.8 ug/l). The associated results are non-detections. No qualification is necessary.

The FB (FB02_090717) exhibited detections of aluminum, total (0.0283 mg/l), barium, total (0.00153 mg/l), calcium, total (0.457 mg/l), chromium, total (0.00098 mg/l), copper, total (0.0005 mg/l), iron, total (0.0545 mg/l), lead, total (0.00131 mg/l), magnesium, total (0.0754 mg/l), manganese, total (0.00095 mg/l), nickel, total (0.00148 mg/l), potassium, total (0.102 mg/l), sodium, total (0.176 mg/l), and zinc, total (0.02017 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The MS for batch WG1041736 exhibited a percent recovery below the LCL for antimony, dissolved (37%). The associated results were previously qualified. No further action is necessary.

The MS for batch WG1041736 exhibited a percent recovery above the UCL for aluminum, dissolved (540%), iron, dissolved (700%), lead, dissolved (126%), magnesium, dissolved (193%), and manganese, dissolved (133%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS for batch WG1041736 exhibited a percent recovery below the LCL for calcium, dissolved (0%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS for batch WG1043235 exhibited a percent recovery below the LCL for calcium, dissolved (15%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

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L1731771:

The MB for batch WG1041197 exhibited detections of copper, total (0.00038 mg/l), and iron, total (0.0263 mg/l), and lead, total (0.00056 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The MB for batch WG1041197 exhibited a detection of thallium, total (0.00019 mg/l). The associated results are non-detections. No qualification is necessary.

The FB (FB03_090817) exhibited detections of antimony, dissolved (0.00079 mg/l) and chromium, dissolved (0.00062 mg/l). The associated results were previously qualified. No further action is necessary.

The FB (FB03_090817) exhibited detections of barium, dissolved (0.00017 mg/l), calcium, dissolved (0.0555 mg/l), and manganese, dissolved (0.00107 mg/l), and sodium, dissolved (0.246 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The FB (FB03_090817) exhibited detections of aluminum, total (0.00357 mg/l) and barium, total (0.0007 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The FB (FB03_090817) exhibited detections of antimony, total (0.00086 mg/l), chromium, total (0.00078 mg/l), and nickel, total (0.0006 mg/l). The associated results were previously qualified. No further action is necessary.

Mercury by SW-846 Method 7470A:

L1731603:

The continuing calibration blank (R1004799-4) exhibited a detection of mercury, dissolved (0.000172 mg/l). The associated results are non-detections. No qualification is necessary.

COMMENTS:

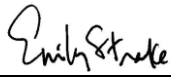
On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

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Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Tyler Goodnough, Langan Staff Scientist

From: Emily Strake, Langan Senior Project Chemist

Date: February 12, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Soil Samples Collected in December 2018 and January 2019
Langan Project No.: 170487001

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil samples collected in December 2018 and January 2019 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), herbicides, polychlorinated biphenyls (PCBs), pesticides, metals, mercury (Hg), toxicity characteristic leaching procedure (TCLP) for lead (Pb), cyanide (CN), and hexavalent chromium (CrVI), trivalent chromium (CrIII), and percent solids (%S) by the methods specified below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Method 8270D and 8270C-SIM
- Herbicides by SW-846 Method 8151A
- PCBs by SW-846 Method 8082A
- Pesticides by SW-846 Method 8081B
- Metals by SW-846 Method 6010D
- Mercury by SW-846 Method 7471B
- TCLP Extraction by EPA Method 1311
- Cyanide by SW-846 Method 9012B
- Hexavalent Chromium by SW-846 Method 7196A
- Trivalent Chromium (calculated)
- Percent Solids by Standard Method 2540G

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

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TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1852610	L1852610-01	RB07_0-2	12/20/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852610	L1852610-02	RB07_8-10	12/20/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852610	L1852610-03	RB07_10-12	12/20/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-01	RB05_0-2	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-02	RB05_8-10	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-03	RB05_13-15	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-04	RB05_19-21	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-05	RB06_0-2	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1904428	L1904428-01	RB06_0-2	12/21/2018	TCLP Pb
L1852926	L1852926-06	RB06_8-10	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-07	RB06_10-12	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-08	RB04_0-2	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII
L1852926	L1852926-09	RB04_8-10	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1852926	L1852926-10	RB04_13-15	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-11	SODUP01_122118	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-12	SOTB01_122118	12/21/2018	VOCs
L1852926	L1852926-13	SOFB01_122118	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII
L1852926	L1852926-14	RB04_18-20	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853110	L1853110-01	RB03_17-18	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-01	RB03_0-2	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-02	RB03_2-3	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-03	RB03_10-12	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-04	RB12_0-2	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-05	RB12_8-9	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-06	RB12_9-10	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-07	RB12_10-12	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-08	RB02_0-2	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1853111	L1853111-09	RB02_7-9	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-10	RB02_10-12	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-11	RB02_13-15	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-12	SOTB02_122618	12/26/2018	VOCs
L1853234	L1853234-01	RB01_0-2	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-02	RB01_14-15	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-03	RB01_25-27	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-04	RB08_0-2	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-05	RB08_10-12	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-06	RB08_12-14	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-07	RB08_14-16	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-08	SODUP02_122718	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-09	RB01_9-11	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-10	SOTB03_122718	12/27/2018	VOCs
L1853234	L1853234-11	SOFB02_122718	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1900156	L1900156-01	RB09_0-2	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-02	RB09_19-21	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-03	RB09_28-30	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-04	RB11_0-2	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-05	RB11_19-21	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-06	RB11_28-30	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-07	SODUP03_010219	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-08	SOTB04_010219	1/2/2019	VOCs
L1900324	L1900324-01	RB21_0-2	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1904428	L1904428-03	RB21_0-2	1/3/2019	TCLP Pb
L1900324	L1900324-02	RB21_2-4	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-03	RB21_18-20	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-04	RB22_0-2	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-05	RB22_3-5	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-06	RB19_0-2	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1900324	L1900324-07	RB19_20-22	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-08	RB19_24-25	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-09	SOTB05_010319	1/3/2019	VOCs
L1900536	L1900536-01	RB17_0-2	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-02	RB17_4-6	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-03	RB17_8-10	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-04	RB17_18-20	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-05	RB18_0-2	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-06	RB18_6-8	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-07	RB18_15-17	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-08	RB18_18-20	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-09	RB20_0-2	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1904428	L1904428-02	RB20_13-15	1/4/2019	TCLP Pb
L1900536	L1900536-10	RB20_7-9	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-11	RB20_13-15	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1900536	L1900536-12	RB20_18-20	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-13	RB22_20-22	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-14	SOTB06_010419	1/4/2019	VOCs
L1900707	L1900707-01	RB13_0-2	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-02	RB13_18-20	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-03	RB13_22-24	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-04	RB13_33-35	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-05	RB14_0-2	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-06	RB14_18-20	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-07	RB14_23-25	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-08	RB14_33-35	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-09	SODUP04_010719	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-10	SOTB06_010719	1/7/2019	VOCs
L1900707	L1900707-11	SOFB03_010719	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII
L1900879	L1900879-01	RB10_0-2	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1900879	L1900879-02	RB10_18-20	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-03	RB10_33-35	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-04	RB15_0-2	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-05	RB15_18-20	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-06	RB15_23-25	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-07	RB15_28-30	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-08	RB16_0-2	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-09	RB16_13-15	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-10	RB16_18-20	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-11	SODUP05_010819	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-12	SOFB04_010819	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII
L1900879	L1900879-13	SOTB07_010819	1/8/2019	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016,

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Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-17, "Validating Chlorinated Herbicides" (December 2010, Revision 3.1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-36A, "Pesticide Data Validation" (October 2016, Revision 1), USEPA Region II SOP #HW-3a, "ICP-AES Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and Cyanide Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, sample extraction and digestion, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, serial dilutions, dual column performance, field duplicate, and field blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on

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the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RB13_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB13_0-2	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB13_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB13_0-2	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB13_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB13_0-2	6010D	7782-49-2	SELENIUM, TOTAL	U (1.78)
RB13_18-20	SW8081B	8001-35-2	TOXAPHENE	UJ
RB13_18-20	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB13_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB13_18-20	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB13_18-20	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB13_18-20	6010D	7782-49-2	SELENIUM, TOTAL	U (1.81)
RB13_22-24	SW8081B	8001-35-2	TOXAPHENE	UJ
RB13_22-24	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB13_22-24	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB13_22-24	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB13_22-24	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB13_22-24	6010D	7439-95-4	MAGNESIUM, TOTAL	J
RB13_22-24	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB13_22-24	6010D	7439-96-5	MANGANESE, TOTAL	J
RB13_22-24	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB13_33-35	SW8081B	8001-35-2	TOXAPHENE	UJ
RB13_33-35	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB13_33-35	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB13_33-35	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB13_33-35	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB13_33-35	6010D	7782-49-2	SELENIUM, TOTAL	U (1.7)

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RB14_0-2	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB14_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB14_0-2	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB14_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB14_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB14_0-2	6010D	7782-49-2	SELENIUM, TOTAL	U (1.83)
RB14_18-20	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB14_18-20	SW8081B	8001-35-2	TOXAPHENE	UJ
RB14_18-20	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB14_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB14_18-20	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB14_23-25	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
RB14_23-25	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB14_23-25	SW8260C	108-67-8	1,3,5-TRIMETHYLBENZENE	J
RB14_23-25	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
RB14_23-25	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB14_23-25	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
RB14_23-25	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB14_23-25	6010D	7439-96-5	MANGANESE, TOTAL	J
RB14_23-25	SW8270D	111-91-1	BIS(2-CHLOROETHOXY)METHANE	UJ
RB14_23-25	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB14_23-25	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB14_23-25	SW8270D	91-20-3	NAPHTHALENE	J
RB14_23-25	SW8081B	8001-35-2	TOXAPHENE	UJ
RB14_23-25	SW8260C	100-41-4	ETHYLBENZENE	J
RB14_23-25	SW8260C	98-82-8	ISOPROPYLBENZENE	J
RB14_23-25	SW8260C	91-20-3	NAPHTHALENE	J
RB14_23-25	SW8260C	104-51-8	N-BUTYLBENZENE	J
RB14_23-25	SW8260C	103-65-1	N-PROPYLBENZENE	J
RB14_23-25	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	J
RB14_23-25	SW8260C	135-98-8	SEC-BUTYLBENZENE	J

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RB14_33-35	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB14_33-35	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB14_33-35	SW8081B	8001-35-2	TOXAPHENE	UJ
RB14_33-35	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB14_33-35	SW8270D	100-01-6	4-NITROANILINE	UJ
RB14_33-35	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP04_010719	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
SODUP04_010719	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
SODUP04_010719	SW8260C	108-67-8	1,3,5-TRIMETHYLBENZENE	J
SODUP04_010719	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
SODUP04_010719	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SODUP04_010719	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
SODUP04_010719	SW8270D	106-47-8	4-CHLOROANILINE	UJ
SODUP04_010719	SW8270D	100-01-6	4-NITROANILINE	UJ
SODUP04_010719	6010D	7439-96-5	MANGANESE, TOTAL	J
SODUP04_010719	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP04_010719	SW8270D	91-20-3	NAPHTHALENE	J
SODUP04_010719	SW8081B	8001-35-2	TOXAPHENE	UJ
SODUP04_010719	SW8260C	100-41-4	ETHYLBENZENE	J
SODUP04_010719	SW8260C	98-82-8	ISOPROPYLBENZENE	J
SODUP04_010719	SW8260C	91-20-3	NAPHTHALENE	J
SODUP04_010719	SW8260C	104-51-8	N-BUTYLBENZENE	J
SODUP04_010719	SW8260C	103-65-1	N-PROPYLBENZENE	J
SODUP04_010719	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	J
SODUP04_010719	SW8260C	135-98-8	SEC-BUTYLBENZENE	J
SOFB03_010719	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
SOFB03_010719	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOFB03_010719	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOFB03_010719	SW8260C	78-93-3	2-BUTANONE	UJ
SOFB03_010719	SW8260C	591-78-6	2-HEXANONE	UJ
SOFB03_010719	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOFB03_010719	SW8260C	67-64-1	ACETONE	UJ

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SOFB03_010719	SW8260C	74-83-9	BROMOMETHANE	UJ
SOFB03_010719	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOFB03_010719	SW8260C	91-20-3	NAPHTHALENE	UJ
SOFB03_010719	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SOFB03_010719	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SOFB03_010719	SW8270DSI M	87-86-5	PENTACHLOROPHENOL	UJ
SOTB06_010719	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
SOTB06_010719	SW8260C	96-12-8	1,2-DIBROMO-3- CHLOROPROPANE	UJ
SOTB06_010719	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB06_010719	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB06_010719	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB06_010719	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB06_010719	SW8260C	67-64-1	ACETONE	UJ
SOTB06_010719	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB06_010719	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOTB06_010719	SW8260C	91-20-3	NAPHTHALENE	UJ
SOTB06_010719	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB17_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB17_0-2	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB17_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB17_0-2	6010D	7440-39-3	BARIUM, TOTAL	J
RB17_0-2	SW8270D	108-60-1	BIS(2- CHLOROISOPROPYL)ETHER	UJ
RB17_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB17_0-2	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB17_0-2	6010D	7440-43-9	CADMIUM, TOTAL	J
RB17_0-2	6010D	7440-70-2	CALCIUM, TOTAL	J
RB17_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB17_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB17_0-2	6010D	7440-50-8	COPPER, TOTAL	J
RB17_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RB17_0-2	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ
RB17_0-2	6010D	7439-89-6	IRON, TOTAL	J
RB17_0-2	6010D	7439-95-4	MAGNESIUM, TOTAL	J
RB17_0-2	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB17_0-2	6010D	7440-02-0	NICKEL, TOTAL	J
RB17_0-2	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB17_0-2	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB17_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB17_0-2	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB17_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB17_18-20	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB17_18-20	6010D	7440-38-2	ARSENIC, TOTAL	J
RB17_18-20	6010D	7440-39-3	BARIUM, TOTAL	J
RB17_18-20	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB17_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB17_18-20	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB17_18-20	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB17_18-20	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB17_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB17_18-20	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ
RB17_18-20	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB17_18-20	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB17_18-20	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB17_18-20	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB17_4-6	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB17_4-6	SW8081B	72-54-8	4,4'-DDD	UJ
RB17_4-6	SW8081B	72-55-9	4,4'-DDE	UJ
RB17_4-6	SW8081B	50-29-3	4,4'-DDT	UJ
RB17_4-6	SW8081B	309-00-2	ALDRIN	UJ
RB17_4-6	SW8081B	319-84-6	ALPHA-BHC	UJ
RB17_4-6	6010D	7440-38-2	ARSENIC, TOTAL	J
RB17_4-6	6010D	7440-39-3	BARIUM, TOTAL	J

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RB17_4-6	SW8081B	319-85-7	BETA-BHC	UJ
RB17_4-6	SW8260C	74-83-9	BROMOMETHANE	UJ
RB17_4-6	SW8081B	57-74-9	CHLORDANE	UJ
RB17_4-6	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB17_4-6	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB17_4-6	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB17_4-6	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB17_4-6	SW8081B	319-86-8	DELTA-BHC	UJ
RB17_4-6	SW8081B	60-57-1	DIELDRIN	UJ
RB17_4-6	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB17_4-6	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB17_4-6	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB17_4-6	SW8081B	72-20-8	ENDRIN	UJ
RB17_4-6	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB17_4-6	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB17_4-6	SW8081B	76-44-8	HEPTACHLOR	UJ
RB17_4-6	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB17_4-6	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB17_4-6	SW8081B	58-89-9	LINDANE	UJ
RB17_4-6	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB17_4-6	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB17_4-6	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB17_4-6	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB17_4-6	SW8081B	8001-35-2	TOXAPHENE	UJ
RB17_4-6	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB17_8-10	6010D	7440-38-2	ARSENIC, TOTAL	J
RB17_8-10	6010D	7440-39-3	BARIUM, TOTAL	J
RB17_8-10	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB17_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB17_8-10	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB17_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ

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RB18_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB18_0-2	6010D	7440-39-3	BARIUM, TOTAL	J
RB18_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB18_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB18_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB18_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB18_15-17	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB18_15-17	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB18_15-17	6010D	7440-38-2	ARSENIC, TOTAL	UJ
RB18_15-17	6010D	7440-39-3	BARIUM, TOTAL	J
RB18_15-17	SW8270D	108-60-1	BIS(2- CHLOROISOPROPYL)ETHER	UJ
RB18_15-17	SW8260C	74-83-9	BROMOMETHANE	UJ
RB18_15-17	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB18_15-17	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB18_15-17	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB18_15-17	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB18_15-17	SW8270D	117-84-0	DI-N-OCTYLPHTHALATE	UJ
RB18_15-17	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB18_15-17	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB18_15-17	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB18_15-17	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB18_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB18_18-20	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB18_18-20	6010D	7440-38-2	ARSENIC, TOTAL	UJ
RB18_18-20	6010D	7440-39-3	BARIUM, TOTAL	J
RB18_18-20	SW8270D	108-60-1	BIS(2- CHLOROISOPROPYL)ETHER	UJ
RB18_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB18_18-20	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB18_18-20	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB18_18-20	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB18_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ

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RB18_18-20	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ
RB18_18-20	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB18_18-20	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB18_18-20	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB18_18-20	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB18_6-8	6010D	7440-38-2	ARSENIC, TOTAL	J
RB18_6-8	6010D	7440-39-3	BARIUM, TOTAL	J
RB18_6-8	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB18_6-8	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB18_6-8	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB20_0-2	6010D	7440-39-3	BARIUM, TOTAL	J
RB20_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB20_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB20_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB20_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB20_0-2	SW8260C	67-64-1	ACETONE	J
RB20_0-2	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB20_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB20_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB20_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_13-15	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB20_13-15	6010D	7440-38-2	ARSENIC, TOTAL	J
RB20_13-15	6010D	7440-39-3	BARIUM, TOTAL	J
RB20_13-15	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB20_13-15	SW8260C	74-83-9	BROMOMETHANE	UJ
RB20_13-15	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB20_13-15	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB20_13-15	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB20_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	J

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RB20_13-15	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ
RB20_13-15	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB20_13-15	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB20_13-15	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB20_13-15	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB20_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_18-20	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB20_18-20	6010D	7440-38-2	ARSENIC, TOTAL	J
RB20_18-20	6010D	7440-39-3	BARIUM, TOTAL	J
RB20_18-20	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB20_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB20_18-20	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB20_18-20	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB20_18-20	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB20_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB20_18-20	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ
RB20_18-20	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB20_18-20	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB20_18-20	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB20_18-20	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB20_7-9	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_7-9	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB20_7-9	6010D	7440-38-2	ARSENIC, TOTAL	J
RB20_7-9	6010D	7440-39-3	BARIUM, TOTAL	J
RB20_7-9	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB20_7-9	SW8260C	74-83-9	BROMOMETHANE	UJ
RB20_7-9	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB20_7-9	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB20_7-9	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB20_7-9	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB20_7-9	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ

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RB20_7-9	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB20_7-9	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB20_7-9	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB20_7-9	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB22_20-22	6010D	7440-38-2	ARSENIC, TOTAL	J
RB22_20-22	6010D	7440-39-3	BARIUM, TOTAL	J
RB22_20-22	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB22_20-22	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB22_20-22	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB22_20-22	SW8260C	591-78-6	2-HEXANONE	UJ
RB22_20-22	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB22_20-22	SW8260C	67-64-1	ACETONE	UJ
RB22_20-22	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB22_20-22	SW8270D	108-60-1	BIS(2- CHLOROISOPROPYL)ETHER	UJ
RB22_20-22	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB22_20-22	SW8270D	117-84-0	DI-N-OCTYLPHTHALATE	UJ
RB22_20-22	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB22_20-22	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB22_20-22	SW8260C	75-01-4	VINYL CHLORIDE	UJ
SOTB06_010419	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
SOTB06_010419	SW8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
SOTB06_010419	SW8260C	96-12-8	1,2-DIBROMO-3- CHLOROPROPANE	UJ
SOTB06_010419	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB06_010419	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB06_010419	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB06_010419	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB06_010419	SW8260C	67-64-1	ACETONE	UJ
SOTB06_010419	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB06_010419	SW8260C	91-20-3	NAPHTHALENE	UJ
RB19_0-2	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB19_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J

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RB19_0-2	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB19_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB19_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB19_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB19_0-2	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB19_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB19_0-2	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB19_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB19_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB19_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB19_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB19_0-2	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB19_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB19_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB19_20-22	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB19_20-22	6010D	7440-38-2	ARSENIC, TOTAL	J
RB19_20-22	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB19_20-22	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB19_20-22	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB19_20-22	SW8081B	8001-35-2	TOXAPHENE	UJ
RB19_20-22	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB19_20-22	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB19_24-25	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB19_24-25	6010D	7440-38-2	ARSENIC, TOTAL	J
RB19_24-25	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB19_24-25	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB19_24-25	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB19_24-25	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB19_24-25	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB19_24-25	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB19_24-25	SW8260C	74-83-9	BROMOMETHANE	UJ
RB19_24-25	SW7471B	7439-97-6	MERCURY, TOTAL	J

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RB19_24-25	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB19_24-25	SW8081B	8001-35-2	TOXAPHENE	UJ
RB19_24-25	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB19_24-25	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB19_24-25	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB19_24-25	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB21_0-2	6010D	7440-36-0	ANTIMONY, TOTAL	J
RB21_0-2	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB21_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB21_0-2	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB21_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB21_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
RB21_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB21_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB21_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB21_0-2	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB21_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB21_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB21_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB21_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB21_0-2	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB21_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB21_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB21_18-20	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB21_18-20	6010D	7440-38-2	ARSENIC, TOTAL	J
RB21_18-20	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB21_18-20	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB21_18-20	SW7471B	7439-97-6	MERCURY, TOTAL	UJ
RB21_18-20	SW8081B	33213-65-9	ENDOSULFAN II	J
RB21_18-20	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB21_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB21_18-20	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ

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RB21_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB21_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB21_18-20	SW8081B	8001-35-2	TOXAPHENE	UJ
RB21_18-20	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB21_18-20	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB21_18-20	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB21_18-20	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB21_18-20	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB21_2-4	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB21_2-4	6010D	7440-38-2	ARSENIC, TOTAL	J
RB21_2-4	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB21_2-4	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB21_2-4	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB21_2-4	SW8270D	88-75-5	2-NITROPHENOL	UJ
RB21_2-4	SW8270D	534-52-1	4,6-DINITRO-O-CRESOL	UJ
RB21_2-4	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB21_2-4	SW8270D	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	UJ
RB21_2-4	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB21_2-4	SW8270D	84-74-2	DI-N-BUTYLPHTHALATE	UJ
RB21_2-4	SW8270D	117-84-0	DI-N-OCTYLPHTHALATE	UJ
RB21_2-4	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB21_2-4	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB21_2-4	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB21_2-4	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB21_2-4	SW8260C	74-83-9	BROMOMETHANE	UJ
RB21_2-4	SW8081B	8001-35-2	TOXAPHENE	UJ
RB21_2-4	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB21_2-4	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB21_2-4	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB21_2-4	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB21_2-4	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB22_0-2	6010D	7440-36-0	ANTIMONY, TOTAL	UJ

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RB22_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB22_0-2	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB22_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB22_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB22_0-2	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB22_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB22_0-2	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB22_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB22_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB22_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB22_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB22_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB22_0-2	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB22_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB22_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB22_3-5	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB22_3-5	6010D	7440-38-2	ARSENIC, TOTAL	J
RB22_3-5	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB22_3-5	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB22_3-5	SW8081B	72-55-9	4,4'-DDE	J
RB22_3-5	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB22_3-5	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB22_3-5	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB22_3-5	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB22_3-5	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB22_3-5	SW8260C	74-83-9	BROMOMETHANE	U (2.1)
RB22_3-5	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB22_3-5	SW8081B	8001-35-2	TOXAPHENE	UJ
RB22_3-5	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB22_3-5	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB22_3-5	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB22_3-5	SW8260C	75-01-4	VINYL CHLORIDE	UJ

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SOTB05_010319	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOTB05_010319	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB05_010319	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB05_010319	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB05_010319	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB05_010319	SW8260C	67-64-1	ACETONE	UJ
SOTB05_010319	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB05_010319	SW8260C	108-05-4	VINYL ACETATE	UJ
RB09_0-2	SW8081B	72-54-8	4,4'-DDD	UJ
RB09_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB09_0-2	SW8081B	72-55-9	4,4'-DDE	UJ
RB09_0-2	SW8081B	50-29-3	4,4'-DDT	UJ
RB09_0-2	SW8081B	309-00-2	ALDRIN	UJ
RB09_0-2	SW8081B	319-84-6	ALPHA-BHC	UJ
RB09_0-2	SW8081B	319-85-7	BETA-BHC	UJ
RB09_0-2	SW8081B	57-74-9	CHLORDANE	UJ
RB09_0-2	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB09_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB09_0-2	SW8081B	319-86-8	DELTA-BHC	UJ
RB09_0-2	SW8081B	60-57-1	DIELDRIN	UJ
RB09_0-2	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB09_0-2	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB09_0-2	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB09_0-2	SW8081B	72-20-8	ENDRIN	UJ
RB09_0-2	6010D	7782-49-2	SELENIUM, TOTAL	U (1.64)
RB09_0-2	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB09_0-2	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB09_0-2	SW8081B	76-44-8	HEPTACHLOR	UJ
RB09_0-2	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB09_0-2	SW8081B	58-89-9	LINDANE	UJ
RB09_0-2	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB09_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ

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RB09_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB09_19-21	6010D	7440-39-3	BARIUM, TOTAL	J
RB09_19-21	SW8081B	72-54-8	4,4'-DDD	UJ
RB09_19-21	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
RB09_19-21	SW8081B	72-55-9	4,4'-DDE	UJ
RB09_19-21	6010D	7439-92-1	LEAD, TOTAL	J
RB09_19-21	SW8081B	50-29-3	4,4'-DDT	UJ
RB09_19-21	SW8081B	309-00-2	ALDRIN	UJ
RB09_19-21	SW8081B	319-84-6	ALPHA-BHC	UJ
RB09_19-21	SW8081B	319-85-7	BETA-BHC	UJ
RB09_19-21	SW8081B	57-74-9	CHLORDANE	UJ
RB09_19-21	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
RB09_19-21	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB09_19-21	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB09_19-21	SW8081B	319-86-8	DELTA-BHC	UJ
RB09_19-21	SW8260C	71-43-2	BENZENE	J
RB09_19-21	6010D	7782-49-2	SELENIUM, TOTAL	U (1.83)
RB09_19-21	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB09_19-21	SW8081B	60-57-1	DIELDRIN	UJ
RB09_19-21	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB09_19-21	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB09_19-21	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB09_19-21	SW8081B	72-20-8	ENDRIN	UJ
RB09_19-21	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
RB09_19-21	SW8270D	206-44-0	FLUORANTHENE	J
RB09_19-21	SW8270D	91-20-3	NAPHTHALENE	J
RB09_19-21	SW8270D	85-01-8	PHENANTHRENE	J
RB09_19-21	SW8270D	129-00-0	PYRENE	J
RB09_19-21	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB09_19-21	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB09_19-21	SW8081B	76-44-8	HEPTACHLOR	UJ
RB09_19-21	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ

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RB09_19-21	SW8081B	58-89-9	LINDANE	UJ
RB09_19-21	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB09_19-21	SW8081B	8001-35-2	TOXAPHENE	UJ
RB09_19-21	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB09_19-21	SW8260C	98-82-8	ISOPROPYLBENZENE	J
RB09_19-21	SW8260C	104-51-8	N-BUTYLBENZENE	J
RB09_19-21	SW8260C	103-65-1	N-PROPYLBENZENE	J
RB09_19-21	SW8260C	135-98-8	SEC-BUTYLBENZENE	J
RB09_28-30	SW8081B	72-54-8	4,4'-DDD	UJ
RB09_28-30	SW8081B	72-55-9	4,4'-DDE	UJ
RB09_28-30	SW8081B	50-29-3	4,4'-DDT	UJ
RB09_28-30	SW8081B	309-00-2	ALDRIN	UJ
RB09_28-30	SW8081B	319-84-6	ALPHA-BHC	UJ
RB09_28-30	SW8081B	319-85-7	BETA-BHC	UJ
RB09_28-30	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB09_28-30	SW8081B	57-74-9	CHLORDANE	UJ
RB09_28-30	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB09_28-30	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB09_28-30	SW8081B	319-86-8	DELTA-BHC	UJ
RB09_28-30	SW8081B	60-57-1	DIELDRIN	UJ
RB09_28-30	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB09_28-30	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB09_28-30	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB09_28-30	SW8081B	72-20-8	ENDRIN	UJ
RB09_28-30	6010D	7782-49-2	SELENIUM, TOTAL	U (1.89)
RB09_28-30	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB09_28-30	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB09_28-30	SW8081B	76-44-8	HEPTACHLOR	UJ
RB09_28-30	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB09_28-30	SW8081B	58-89-9	LINDANE	UJ
RB09_28-30	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB09_28-30	SW8081B	8001-35-2	TOXAPHENE	UJ

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RB09_28-30	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB11_0-2	SW8081B	72-54-8	4,4'-DDD	J
RB11_0-2	SW8081B	72-55-9	4,4'-DDE	UJ
RB11_0-2	SW8081B	50-29-3	4,4'-DDT	J
RB11_0-2	SW8081B	309-00-2	ALDRIN	UJ
RB11_0-2	SW8081B	319-84-6	ALPHA-BHC	UJ
RB11_0-2	SW8081B	319-85-7	BETA-BHC	UJ
RB11_0-2	SW8081B	57-74-9	CHLORDANE	UJ
RB11_0-2	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB11_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB11_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB11_0-2	SW8081B	319-86-8	DELTA-BHC	UJ
RB11_0-2	SW8081B	60-57-1	DIELDRIN	J
RB11_0-2	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB11_0-2	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB11_0-2	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB11_0-2	SW8081B	72-20-8	ENDRIN	UJ
RB11_0-2	6010D	7782-49-2	SELENIUM, TOTAL	U (1.69)
RB11_0-2	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB11_0-2	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB11_0-2	SW8081B	76-44-8	HEPTACHLOR	UJ
RB11_0-2	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB11_0-2	SW8081B	58-89-9	LINDANE	UJ
RB11_0-2	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB11_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB11_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB11_19-21	SW8081B	72-54-8	4,4'-DDD	UJ
RB11_19-21	SW8081B	72-55-9	4,4'-DDE	UJ
RB11_19-21	SW8081B	50-29-3	4,4'-DDT	UJ
RB11_19-21	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB11_19-21	SW8081B	309-00-2	ALDRIN	UJ
RB11_19-21	SW8081B	319-84-6	ALPHA-BHC	UJ

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RB11_19-21	SW8081B	319-85-7	BETA-BHC	UJ
RB11_19-21	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB11_19-21	SW8081B	57-74-9	CHLORDANE	UJ
RB11_19-21	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB11_19-21	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB11_19-21	SW8081B	319-86-8	DELTA-BHC	UJ
RB11_19-21	SW8081B	60-57-1	DIELDRIN	UJ
RB11_19-21	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB11_19-21	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB11_19-21	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB11_19-21	SW8081B	72-20-8	ENDRIN	UJ
RB11_19-21	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB11_19-21	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB11_19-21	SW8081B	76-44-8	HEPTACHLOR	UJ
RB11_19-21	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB11_19-21	SW8081B	58-89-9	LINDANE	UJ
RB11_19-21	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB11_19-21	6010D	7782-49-2	SELENIUM, TOTAL	U (1.84)
RB11_19-21	SW8081B	8001-35-2	TOXAPHENE	UJ
RB11_19-21	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB11_28-30	SW8081B	72-54-8	4,4'-DDD	UJ
RB11_28-30	SW8081B	72-55-9	4,4'-DDE	UJ
RB11_28-30	SW8081B	50-29-3	4,4'-DDT	UJ
RB11_28-30	SW8081B	309-00-2	ALDRIN	UJ
RB11_28-30	SW8081B	319-84-6	ALPHA-BHC	UJ
RB11_28-30	SW8081B	319-85-7	BETA-BHC	UJ
RB11_28-30	SW8081B	57-74-9	CHLORDANE	UJ
RB11_28-30	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB11_28-30	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB11_28-30	SW8081B	319-86-8	DELTA-BHC	UJ
RB11_28-30	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB11_28-30	SW8081B	60-57-1	DIELDRIN	UJ

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RB11_28-30	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB11_28-30	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB11_28-30	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB11_28-30	SW8081B	72-20-8	ENDRIN	UJ
RB11_28-30	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB11_28-30	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB11_28-30	SW8081B	76-44-8	HEPTACHLOR	UJ
RB11_28-30	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB11_28-30	SW8081B	58-89-9	LINDANE	UJ
RB11_28-30	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB11_28-30	SW8081B	8001-35-2	TOXAPHENE	UJ
RB11_28-30	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
SODUP03_010219	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
SODUP03_010219	SW8151A	93-76-5	2,4,5-T	UJ
SODUP03_010219	SW8151A	93-72-1	2,4,5-TP (SILVEX)	UJ
SODUP03_010219	SW8151A	94-75-7	2,4-D	UJ
SODUP03_010219	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
SODUP03_010219	SW8081B	72-54-8	4,4'-DDD	UJ
SODUP03_010219	SW8081B	72-55-9	4,4'-DDE	UJ
SODUP03_010219	SW8081B	50-29-3	4,4'-DDT	UJ
SODUP03_010219	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
SODUP03_010219	SW8260C	123-91-1	1,4-DIOXANE	UJ
SODUP03_010219	SW8081B	309-00-2	ALDRIN	UJ
SODUP03_010219	SW8081B	319-84-6	ALPHA-BHC	UJ
SODUP03_010219	6010D	7440-39-3	BARIUM, TOTAL	J
SODUP03_010219	SW8081B	319-85-7	BETA-BHC	UJ
SODUP03_010219	SW8270D	92-52-4	BIPHENYL	J
SODUP03_010219	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
SODUP03_010219	SW8081B	57-74-9	CHLORDANE	UJ
SODUP03_010219	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
SODUP03_010219	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP03_010219	SW8081B	319-86-8	DELTA-BHC	UJ

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SODUP03_010219	SW8081B	60-57-1	DIELDRIN	UJ
SODUP03_010219	SW8081B	959-98-8	ENDOSULFAN I	UJ
SODUP03_010219	SW8081B	33213-65-9	ENDOSULFAN II	UJ
SODUP03_010219	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
SODUP03_010219	SW8081B	72-20-8	ENDRIN	UJ
SODUP03_010219	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
SODUP03_010219	SW8081B	53494-70-5	ENDRIN KETONE	UJ
SODUP03_010219	SW8270D	206-44-0	FLUORANTHENE	J
SODUP03_010219	SW8081B	76-44-8	HEPTACHLOR	UJ
SODUP03_010219	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
SODUP03_010219	SW8260C	71-43-2	BENZENE	J
SODUP03_010219	6010D	7439-92-1	LEAD, TOTAL	J
SODUP03_010219	SW8081B	58-89-9	LINDANE	UJ
SODUP03_010219	SW8081B	72-43-5	METHOXYCHLOR	UJ
SODUP03_010219	SW8270D	91-20-3	NAPHTHALENE	J
SODUP03_010219	SW8270D	85-01-8	PHENANTHRENE	J
SODUP03_010219	SW8270D	129-00-0	PYRENE	J
SODUP03_010219	6010D	7782-49-2	SELENIUM, TOTAL	U (1.86)
SODUP03_010219	SW8081B	8001-35-2	TOXAPHENE	UJ
SODUP03_010219	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
SODUP03_010219	SW8260C	98-82-8	ISOPROPYLBENZENE	J
SODUP03_010219	SW8260C	104-51-8	N-BUTYLBENZENE	J
SODUP03_010219	SW8260C	103-65-1	N-PROPYLBENZENE	J
SODUP03_010219	SW8260C	135-98-8	SEC-BUTYLBENZENE	J
SOTB04_010219	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB04_010219	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB04_010219	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SOTB04_010219	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB04_010219	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB04_010219	SW8260C	67-64-1	ACETONE	J
SOTB04_010219	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOTB04_010219	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ

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SOTB04_010219	SW8260C	108-05-4	VINYL ACETATE	UJ
RB01_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB01_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB01_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB01_0-2	6010D	7440-70-2	CALCIUM, TOTAL	J
RB01_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB01_0-2	6010D	7440-50-8	COPPER, TOTAL	J
RB01_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB01_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
RB01_0-2	6010D	7439-92-1	LEAD, TOTAL	J
RB01_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB01_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB01_0-2	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB01_0-2	6010D	7440-66-6	ZINC, TOTAL	J
RB01_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB01_0-2	SW8260C	75-00-3	CHLOROETHANE	UJ
RB01_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB01_0-2	SW8260C	60-29-7	ETHYL ETHER	UJ
RB01_0-2	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB01_14-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB01_14-15	SW8270D	88-74-4	2-NITROANILINE	UJ
RB01_14-15	SW8270D	88-75-5	2-NITROPHENOL	UJ
RB01_14-15	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB01_14-15	6010D	7440-70-2	CALCIUM, TOTAL	J
RB01_14-15	6010D	7440-50-8	COPPER, TOTAL	J
RB01_14-15	6010D	7439-92-1	LEAD, TOTAL	J
RB01_14-15	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB01_14-15	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB01_14-15	6010D	7440-66-6	ZINC, TOTAL	J
RB01_25-27	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB01_25-27	SW8260C	591-78-6	2-HEXANONE	UJ
RB01_25-27	SW8081B	50-29-3	4,4'-DDT	J

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RB01_25-27	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB01_25-27	6010D	7440-70-2	CALCIUM, TOTAL	J
RB01_25-27	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB01_25-27	6010D	7440-50-8	COPPER, TOTAL	J
RB01_25-27	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB01_25-27	6010D	7439-92-1	LEAD, TOTAL	J
RB01_25-27	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB01_25-27	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB01_25-27	6010D	7440-66-6	ZINC, TOTAL	J
RB01_9-11	SW8270D	88-74-4	2-NITROANILINE	UJ
RB01_9-11	SW8270D	88-75-5	2-NITROPHENOL	UJ
RB01_9-11	6010D	7440-70-2	CALCIUM, TOTAL	J
RB01_9-11	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB01_9-11	6010D	7440-50-8	COPPER, TOTAL	J
RB01_9-11	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB01_9-11	6010D	7439-92-1	LEAD, TOTAL	J
RB01_9-11	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB01_9-11	SW8151A	93-76-5	2,4,5-T	UJ
RB01_9-11	SW8151A	93-72-1	2,4,5-TP (SILVEX)	UJ
RB01_9-11	SW8151A	94-75-7	2,4-D	UJ
RB01_9-11	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB01_9-11	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB01_9-11	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB01_9-11	6010D	7440-66-6	ZINC, TOTAL	J
RB08_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB08_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB08_0-2	6010D	7440-70-2	CALCIUM, TOTAL	J
RB08_0-2	SW8081B	72-55-9	4,4'-DDE	J
RB08_0-2	SW8081B	50-29-3	4,4'-DDT	J
RB08_0-2	SW8081B	5103-71-9	CIS-CHLORDANE	J
RB08_0-2	6010D	7440-50-8	COPPER, TOTAL	J
RB08_0-2	6010D	7439-92-1	LEAD, TOTAL	J

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RB08_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB08_0-2	6010D	7440-66-6	ZINC, TOTAL	J
RB08_10-12	6010D	7440-70-2	CALCIUM, TOTAL	J
RB08_10-12	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB08_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB08_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB08_10-12	6010D	7440-50-8	COPPER, TOTAL	J
RB08_10-12	6010D	7439-92-1	LEAD, TOTAL	J
RB08_10-12	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB08_10-12	6010D	7440-66-6	ZINC, TOTAL	J
RB08_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB08_10-12	SW8260C	75-00-3	CHLOROETHANE	UJ
RB08_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB08_10-12	SW8260C	60-29-7	ETHYL ETHER	UJ
RB08_10-12	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB08_12-14	6010D	7440-70-2	CALCIUM, TOTAL	J
RB08_12-14	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB08_12-14	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB08_12-14	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB08_12-14	6010D	7440-50-8	COPPER, TOTAL	J
RB08_12-14	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB08_12-14	6010D	7439-92-1	LEAD, TOTAL	J
RB08_12-14	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB08_12-14	6010D	7440-66-6	ZINC, TOTAL	J
RB08_14-16	6010D	7440-70-2	CALCIUM, TOTAL	J
RB08_14-16	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB08_14-16	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB08_14-16	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB08_14-16	SW8260C	67-64-1	ACETONE	J
RB08_14-16	6010D	7440-50-8	COPPER, TOTAL	J
RB08_14-16	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB08_14-16	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ

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RB08_14-16	6010D	7439-92-1	LEAD, TOTAL	J
RB08_14-16	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB08_14-16	6010D	7440-66-6	ZINC, TOTAL	J
SODUP02_122718	6010D	7440-70-2	CALCIUM, TOTAL	J
SODUP02_122718	SW8260C	123-91-1	1,4-DIOXANE	UJ
SODUP02_122718	SW8260C	67-64-1	ACETONE	J
SODUP02_122718	6010D	7440-50-8	COPPER, TOTAL	J
SODUP02_122718	SW7471B	7439-97-6	MERCURY, TOTAL	J
SODUP02_122718	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
SODUP02_122718	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SODUP02_122718	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP02_122718	6010D	7439-92-1	LEAD, TOTAL	J
SODUP02_122718	6010D	9/7/7440	POTASSIUM, TOTAL	J
SODUP02_122718	6010D	7440-66-6	ZINC, TOTAL	J
SOFB02_122718	6010D	7440-50-8	COPPER, TOTAL	U (0.01)
SOFB02_122718	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SOFB02_122718	SW8270DSI M	91-58-7	2-CHLORONAPHTHALENE	UJ
SOFB02_122718	SW8270DSI M	91-57-6	2-METHYLNAPHTHALENE	UJ
SOFB02_122718	SW8270D	91-94-1	3,3'-DICHLOROBENZIDINE	UJ
SOFB02_122718	SW8270D	106-47-8	4-CHLOROANILINE	UJ
SOFB02_122718	SW8270DSI M	83-32-9	ACENAPHTHENE	UJ
SOFB02_122718	SW8270DSI M	208-96-8	ACENAPHTHYLENE	UJ
SOFB02_122718	SW8270DSI M	120-12-7	ANTHRACENE	UJ
SOFB02_122718	SW8270DSI M	56-55-3	BENZO(A)ANTHRACENE	UJ
SOFB02_122718	SW8270DSI M	50-32-8	BENZO(A)PYRENE	UJ
SOFB02_122718	SW8270DSI M	205-99-2	BENZO(B)FLUORANTHENE	UJ
SOFB02_122718	SW8270DSI M	191-24-2	BENZO(GHI)PERYLENE	J

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SOFB02_122718	SW8270DSI M	207-08-9	BENZO(K)FLUORANTHENE	UJ
SOFB02_122718	SW8270D	65-85-0	BENZOIC ACID	UJ
SOFB02_122718	SW8270DSI M	218-01-9	CHRYSENE	UJ
SOFB02_122718	SW8270DSI M	53-70-3	DIBENZO(A,H)ANTHRACENE	J
SOFB02_122718	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
SOFB02_122718	SW8270DSI M	206-44-0	FLUORANTHENE	UJ
SOFB02_122718	SW8270DSI M	86-73-7	FLUORENE	UJ
SOFB02_122718	SW8270DSI M	118-74-1	HEXACHLOROBENZENE	UJ
SOFB02_122718	SW8270DSI M	87-68-3	HEXACHLOROBUTADIENE	UJ
SOFB02_122718	SW8270DSI M	67-72-1	HEXACHLOROETHANE	UJ
SOFB02_122718	SW8270DSI M	193-39-5	INDENO(1,2,3-CD)PYRENE	J
SOFB02_122718	SW8270DSI M	91-20-3	NAPHTHALENE	UJ
SOFB02_122718	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOFB02_122718	SW8270DSI M	87-86-5	PENTACHLOROPHENOL	UJ
SOFB02_122718	SW8270DSI M	85-01-8	PHENANTHRENE	UJ
SOFB02_122718	SW8270DSI M	129-00-0	PYRENE	UJ
SOFB02_122718	SW8260C	78-93-3	2-BUTANONE	UJ
SOFB02_122718	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOFB02_122718	SW8260C	67-64-1	ACETONE	U (5)
SOFB02_122718	SW8260C	74-83-9	BROMOMETHANE	UJ
SOFB02_122718	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOFB02_122718	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOFB02_122718	SW8260C	108-05-4	VINYL ACETATE	UJ
SOTB03_122718	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB03_122718	SW8260C	78-93-3	2-BUTANONE	UJ

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SOTB03_122718	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB03_122718	SW8260C	67-64-1	ACETONE	J
SOTB03_122718	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB03_122718	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOTB03_122718	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOTB03_122718	SW8260C	108-05-4	VINYL ACETATE	UJ
WG1193824-1	SW8081B	50-29-3	4,4'-DDT	J
RB02_0-2	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB02_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB02_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB02_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB02_0-2	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB02_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB02_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB02_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB02_10-12	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB02_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB02_10-12	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB02_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB02_10-12	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB02_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB02_10-12	SW8081B	33213-65-9	ENDOSULFAN II	J
RB02_10-12	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB02_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB02_13-15	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB02_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB02_13-15	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB02_13-15	SW8260C	74-83-9	BROMOMETHANE	UJ
RB02_13-15	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB02_13-15	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB02_13-15	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB02_13-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ

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RB02_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB02_7-9	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB02_7-9	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB02_7-9	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB02_7-9	SW8260C	74-83-9	BROMOMETHANE	UJ
RB02_7-9	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB02_7-9	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB02_7-9	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB03_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB03_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
RB03_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB03_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_0-2	SW8260C	75-00-3	CHLOROETHANE	UJ
RB03_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB03_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB03_0-2	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB03_0-2	SW8260C	108-05-4	VINYL ACETATE	UJ
RB03_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB03_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB03_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB03_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_10-12	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB03_10-12	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_10-12	SW8260C	75-00-3	CHLOROETHANE	UJ
RB03_10-12	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB03_10-12	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB03_10-12	SW8260C	108-05-4	VINYL ACETATE	UJ
RB03_10-12	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB03_2-3	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ

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RB03_2-3	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB03_2-3	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB03_2-3	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_2-3	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_2-3	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_2-3	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_2-3	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_2-3	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_2-3	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB03_2-3	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB03_2-3	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB03_2-3	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB03_2-3	SW8081B	8001-35-2	TOXAPHENE	UJ
RB12_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB12_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB12_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB12_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB12_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB12_0-2	SW8260C	75-00-3	CHLOROETHANE	UJ
RB12_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB12_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
RB12_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB12_0-2	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB12_0-2	SW8260C	108-05-4	VINYL ACETATE	UJ
RB12_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB12_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB12_10-12	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB12_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB12_10-12	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB12_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB12_10-12	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB12_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	UJ

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RB12_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB12_10-12	SW8081B	8001-35-2	TOXAPHENE	UJ
RB12_8-9	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB12_8-9	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB12_8-9	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB12_8-9	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB12_8-9	SW8260C	74-83-9	BROMOMETHANE	UJ
RB12_8-9	SW8260C	75-00-3	CHLOROETHANE	UJ
RB12_8-9	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB12_8-9	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB12_8-9	SW8082A	11096-82-5	AROCLOR 1260	J
RB12_8-9	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB12_9-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB12_9-10	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB12_9-10	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB12_9-10	SW8260C	74-83-9	BROMOMETHANE	UJ
RB12_9-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB12_9-10	SW8260C	75-00-3	CHLOROETHANE	UJ
RB12_9-10	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB12_9-10	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB12_9-10	SW8260C	108-05-4	VINYL ACETATE	UJ
RB12_9-10	SW8081B	8001-35-2	TOXAPHENE	UJ
RB12_9-10	SW8081B	72-20-8	ENDRIN	J
RB12_9-10	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB12_9-10	SW8260C	75-01-4	VINYL CHLORIDE	UJ
SOTB02_122618	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOTB02_122618	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB02_122618	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB02_122618	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB02_122618	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB02_122618	SW8260C	67-64-1	ACETONE	UJ
SOTB02_122618	SW8260C	74-83-9	BROMOMETHANE	UJ

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RB03_17-18	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_17-18	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB03_17-18	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_17-18	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_17-18	SW8260C	75-00-3	CHLOROETHANE	UJ
RB03_17-18	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB03_17-18	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB03_17-18	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB03_17-18	SW8270D	108-95-2	PHENOL	UJ
RB03_17-18	SW8081B	8001-35-2	TOXAPHENE	UJ
RB03_17-18	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB03_17-18	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB04_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB04_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB04_0-2	SW8260C	78-93-3	2-BUTANONE	UJ
RB04_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB04_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB04_0-2	SW8260C	67-64-1	ACETONE	UJ
RB04_0-2	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB04_0-2	SW8081B	57-74-9	CHLORDANE	UJ
RB04_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB04_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB04_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB04_0-2	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB04_0-2	SW8260C	91-20-3	NAPHTHALENE	UJ
RB04_0-2	SW8260C	100-42-5	STYRENE	UJ
RB04_13-15	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB04_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB04_13-15	SW8260C	78-93-3	2-BUTANONE	UJ
RB04_13-15	SW8260C	591-78-6	2-HEXANONE	UJ
RB04_13-15	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ

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RB04_13-15	SW8260C	67-64-1	ACETONE	J
RB04_13-15	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB04_13-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB04_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB04_13-15	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB04_13-15	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB04_13-15	SW8260C	91-20-3	NAPHTHALENE	UJ
RB04_13-15	SW8260C	100-42-5	STYRENE	UJ
RB04_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB04_18-20	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB04_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB04_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB04_18-20	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB04_18-20	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB04_8-10	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB04_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB04_8-10	SW8260C	78-93-3	2-BUTANONE	UJ
RB04_8-10	SW8260C	591-78-6	2-HEXANONE	UJ
RB04_8-10	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB04_8-10	SW8260C	67-64-1	ACETONE	UJ
RB04_8-10	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB04_8-10	SW8081B	57-74-9	CHLORDANE	UJ
RB04_8-10	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB04_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB04_8-10	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB04_8-10	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB04_8-10	6010D	7439-92-1	LEAD, TOTAL	J
RB04_8-10	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB04_8-10	SW8260C	91-20-3	NAPHTHALENE	UJ

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RB04_8-10	SW8260C	100-42-5	STYRENE	UJ
RB04_8-10	6010D	7440-66-6	ZINC, TOTAL	J
RB05_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB05_0-2	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB05_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB05_0-2	SW8081B	57-74-9	CHLORDANE	UJ
RB05_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB05_0-2	6010D	7439-89-6	IRON, TOTAL	J
RB05_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB05_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB05_0-2	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB05_13-15	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB05_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB05_13-15	SW8260C	78-93-3	2-BUTANONE	UJ
RB05_13-15	SW8260C	591-78-6	2-HEXANONE	UJ
RB05_13-15	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB05_13-15	SW8260C	67-64-1	ACETONE	J
RB05_13-15	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB05_13-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB05_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB05_13-15	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB05_13-15	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB05_13-15	SW8260C	91-20-3	NAPHTHALENE	UJ
RB05_13-15	SW8260C	100-42-5	STYRENE	UJ
RB05_19-21	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB05_19-21	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB05_19-21	SW8260C	78-93-3	2-BUTANONE	UJ
RB05_19-21	SW8260C	591-78-6	2-HEXANONE	UJ
RB05_19-21	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB05_19-21	SW8260C	67-64-1	ACETONE	J

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RB05_19-21	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB05_19-21	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB05_19-21	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB05_19-21	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB05_19-21	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB05_19-21	SW8260C	91-20-3	NAPHTHALENE	UJ
RB05_19-21	SW8260C	100-42-5	STYRENE	UJ
RB05_8-10	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB05_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB05_8-10	SW8260C	78-93-3	2-BUTANONE	UJ
RB05_8-10	SW8260C	591-78-6	2-HEXANONE	UJ
RB05_8-10	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB05_8-10	SW8260C	67-64-1	ACETONE	UJ
RB05_8-10	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB05_8-10	SW8081B	57-74-9	CHLORDANE	UJ
RB05_8-10	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB05_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB05_8-10	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB05_8-10	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB05_8-10	SW8260C	91-20-3	NAPHTHALENE	UJ
RB05_8-10	SW8260C	100-42-5	STYRENE	UJ
RB06_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB06_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB06_0-2	SW8260C	78-93-3	2-BUTANONE	UJ
RB06_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB06_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB06_0-2	SW8260C	67-64-1	ACETONE	UJ
RB06_0-2	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB06_0-2	SW8081B	57-74-9	CHLORDANE	UJ

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RB06_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB06_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB06_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB06_0-2	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB06_0-2	SW8260C	91-20-3	NAPHTHALENE	UJ
RB06_0-2	SW8260C	100-42-5	STYRENE	UJ
RB06_10-12	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB06_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB06_10-12	SW8260C	78-93-3	2-BUTANONE	UJ
RB06_10-12	SW8260C	591-78-6	2-HEXANONE	UJ
RB06_10-12	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB06_10-12	SW8260C	67-64-1	ACETONE	J
RB06_10-12	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB06_10-12	SW8081B	57-74-9	CHLORDANE	UJ
RB06_10-12	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB06_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB06_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB06_10-12	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB06_10-12	SW8260C	91-20-3	NAPHTHALENE	UJ
RB06_10-12	SW8260C	100-42-5	STYRENE	UJ
RB06_8-10	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB06_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB06_8-10	SW8260C	78-93-3	2-BUTANONE	UJ
RB06_8-10	SW8260C	591-78-6	2-HEXANONE	UJ
RB06_8-10	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB06_8-10	SW8260C	67-64-1	ACETONE	J
RB06_8-10	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB06_8-10	SW8081B	57-74-9	CHLORDANE	UJ
RB06_8-10	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB06_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	J

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RB06_8-10	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB06_8-10	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB06_8-10	SW8260C	91-20-3	NAPHTHALENE	UJ
RB06_8-10	SW8260C	100-42-5	STYRENE	UJ
SODUP01_122118	SW8260C	123-91-1	1,4-DIOXANE	UJ
SODUP01_122118	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
SODUP01_122118	SW8260C	74-83-9	BROMOMETHANE	UJ
SODUP01_122118	SW8081B	57-74-9	CHLORDANE	UJ
SODUP01_122118	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP01_122118	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SODUP01_122118	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
SODUP01_122118	6010D	7439-92-1	LEAD, TOTAL	J
SODUP01_122118	SW7471B	7439-97-6	MERCURY, TOTAL	J
SODUP01_122118	6010D	7440-66-6	ZINC, TOTAL	J
SOFB01_122118	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOFB01_122118	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOFB01_122118	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SOFB01_122118	SW8260C	78-93-3	2-BUTANONE	UJ
SOFB01_122118	SW8260C	591-78-6	2-HEXANONE	UJ
SOFB01_122118	SW8270D	91-94-1	3,3'-DICHLOROBENZIDINE	UJ
SOFB01_122118	SW8081B	72-54-8	4,4'-DDD	UJ
SOFB01_122118	SW8081B	72-55-9	4,4'-DDE	UJ
SOFB01_122118	SW8081B	50-29-3	4,4'-DDT	UJ
SOFB01_122118	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOFB01_122118	SW8260C	67-64-1	ACETONE	UJ
SOFB01_122118	SW8081B	309-00-2	ALDRIN	UJ
SOFB01_122118	SW8081B	319-84-6	ALPHA-BHC	UJ
SOFB01_122118	SW8081B	319-85-7	BETA-BHC	UJ
SOFB01_122118	SW8260C	74-83-9	BROMOMETHANE	UJ
SOFB01_122118	SW8081B	57-74-9	CHLORDANE	UJ

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SOFB01_122118	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
SOFB01_122118	6010D	7440-50-8	COPPER, TOTAL	U (0.01)
SOFB01_122118	SW8081B	319-86-8	DELTA-BHC	UJ
SOFB01_122118	SW8081B	60-57-1	DIELDRIN	UJ
SOFB01_122118	SW8081B	959-98-8	ENDOSULFAN I	UJ
SOFB01_122118	SW8081B	33213-65-9	ENDOSULFAN II	UJ
SOFB01_122118	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
SOFB01_122118	SW8081B	72-20-8	ENDRIN	UJ
SOFB01_122118	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
SOFB01_122118	SW8081B	53494-70-5	ENDRIN KETONE	UJ
SOFB01_122118	SW8081B	76-44-8	HEPTACHLOR	UJ
SOFB01_122118	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
SOFB01_122118	SW8081B	58-89-9	LINDANE	UJ
SOFB01_122118	SW8081B	72-43-5	METHOXYCHLOR	UJ
SOFB01_122118	SW8081B	8001-35-2	TOXAPHENE	UJ
SOFB01_122118	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
SOTB01_122118	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOTB01_122118	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB01_122118	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB01_122118	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB01_122118	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB01_122118	SW8260C	67-64-1	ACETONE	UJ
SOTB01_122118	SW8260C	74-83-9	BROMOMETHANE	UJ
RB07_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB07_0-2	SW8081B	5103-71-9	CIS-CHLORDANE	J
RB07_0-2	SW8081B	60-57-1	DIELDRIN	J
RB07_0-2	SW8081B	1031-07-8	ENDOSULFAN SULFATE	J
RB07_0-2	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB07_0-2	6010D	7440-39-3	BARIUM, TOTAL	J
RB07_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB07_0-2	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB07_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ

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RB07_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB07_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB07_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB07_0-2	6010D	7439-92-1	LEAD, TOTAL	J
RB07_0-2	SW7471B	7439-97-6	MERCURY, TOTAL	U (0.15)
RB07_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB07_0-2	6010D	7440-66-6	ZINC, TOTAL	J
RB07_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB07_10-12	6010D	7440-39-3	BARIUM, TOTAL	J
RB07_10-12	SW8270D	65-85-0	BENZOIC ACID	UJ
RB07_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB07_10-12	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB07_10-12	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB07_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB07_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB07_10-12	SW8081B	72-54-8	4,4'-DDD	J
RB07_10-12	6010D	7439-92-1	LEAD, TOTAL	J
RB07_10-12	SW8081B	72-55-9	4,4'-DDE	J
RB07_10-12	SW8081B	50-29-3	4,4'-DDT	J
RB07_10-12	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB07_10-12	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB07_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB07_8-10	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB07_8-10	6010D	7440-39-3	BARIUM, TOTAL	J
RB07_8-10	SW8260C	74-83-9	BROMOMETHANE	UJ
RB07_8-10	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB07_8-10	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB07_8-10	SW8081B	5103-71-9	CIS-CHLORDANE	J
RB07_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB07_8-10	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB07_8-10	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB07_8-10	6010D	7439-92-1	LEAD, TOTAL	J

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RB07_8-10	SW7471B	7439-97-6	MERCURY, TOTAL	U (0.171)
RB07_8-10	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB10_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB10_0-2	SW8260C	78-93-3	2-BUTANONE	UJ
RB10_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB10_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB10_0-2	SW8260C	67-64-1	ACETONE	UJ
RB10_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB10_0-2	SW8260C	108-05-4	VINYL ACETATE	UJ
RB10_0-2	6010D	7440-36-0	ANTIMONY, TOTAL	U (4.27)
RB10_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB10_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB10_0-2	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB10_18-20	6010D	7440-36-0	ANTIMONY, TOTAL	U (5.45)
RB10_18-20	SW8270D	205-99-2	BENZO(B)FLUORANTHENE	J
RB10_18-20	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB10_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB10_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB10_18-20	SW8260C	591-78-6	2-HEXANONE	UJ
RB10_18-20	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB10_18-20	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB10_33-35	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB10_33-35	SW8260C	78-93-3	2-BUTANONE	UJ
RB10_33-35	SW8260C	591-78-6	2-HEXANONE	UJ
RB10_33-35	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB10_33-35	SW8260C	67-64-1	ACETONE	UJ
RB10_33-35	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB10_33-35	SW8260C	108-05-4	VINYL ACETATE	UJ
RB10_33-35	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB10_33-35	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB15_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB15_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ

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RB15_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB15_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB15_0-2	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB15_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB15_18-20	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB15_18-20	SW8151A	93-76-5	2,4,5-T	UJ
RB15_18-20	6010D	7440-36-0	ANTIMONY, TOTAL	U (3.99)
RB15_18-20	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB15_18-20	SW8270D	65-85-0	BENZOIC ACID	UJ
RB15_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB15_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB15_18-20	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB15_18-20	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB15_23-25	SW8151A	93-76-5	2,4,5-T	UJ
RB15_23-25	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
RB15_23-25	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB15_23-25	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB15_23-25	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB15_23-25	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB15_23-25	SW8260C	71-43-2	BENZENE	J
RB15_23-25	SW8270D	91-20-3	NAPHTHALENE	J
RB15_23-25	SW8260C	103-65-1	N-PROPYLBENZENE	J
RB15_28-30	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB15_28-30	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB15_28-30	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB15_28-30	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB16_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB16_0-2	SW8260C	78-93-3	2-BUTANONE	UJ
RB16_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB16_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB16_0-2	SW8260C	67-64-1	ACETONE	UJ
RB16_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ

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RB16_0-2	SW8151A	93-76-5	2,4,5-T	UJ
RB16_0-2	SW8260C	108-05-4	VINYL ACETATE	UJ
RB16_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB16_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB16_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB16_13-15	SW8260C	78-93-3	2-BUTANONE	UJ
RB16_13-15	SW8260C	591-78-6	2-HEXANONE	UJ
RB16_13-15	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB16_13-15	SW8260C	67-64-1	ACETONE	UJ
RB16_13-15	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB16_13-15	SW8151A	93-76-5	2,4,5-T	UJ
RB16_13-15	SW8260C	108-05-4	VINYL ACETATE	UJ
RB16_13-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB16_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB16_13-15	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB16_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB16_18-20	SW8260C	78-93-3	2-BUTANONE	UJ
RB16_18-20	SW8260C	591-78-6	2-HEXANONE	UJ
RB16_18-20	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB16_18-20	SW8260C	67-64-1	ACETONE	UJ
RB16_18-20	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB16_18-20	SW8151A	93-76-5	2,4,5-T	UJ
RB16_18-20	SW8260C	108-05-4	VINYL ACETATE	UJ
RB16_18-20	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB16_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB16_18-20	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
SODUP05_010819	SW8151A	93-76-5	2,4,5-T	UJ
SODUP05_010819	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
SODUP05_010819	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
SODUP05_010819	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP05_010819	SW8260C	123-91-1	1,4-DIOXANE	UJ
SODUP05_010819	SW8260C	591-78-6	2-HEXANONE	UJ

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SODUP05_010819	SW8260C	107-13-1	ACRYLONITRILE	UJ
SODUP05_010819	SW8260C	71-43-2	BENZENE	J
SODUP05_010819	SW8270D	91-20-3	NAPHTHALENE	J
SODUP05_010819	SW8260C	103-65-1	N-PROPYLBENZENE	J
SOFB04_010819	SW8270D	100-02-7	4-NITROPHENOL	UJ
SOFB04_010819	SW8270D	208-96-8	ACENAPHTHYLENE	UJ
SOFB04_010819	SW8270D	131-11-3	DIMETHYL PHTHALATE	UJ
SOFB04_010819	SW8081B	8001-35-2	TOXAPHENE	UJ
SOFB04_010819	SW8270D	59-50-7	P-CHLORO-M-CRESOL	UJ
SOFB04_010819	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOFB04_010819	SW8260C	78-93-3	2-BUTANONE	UJ
SOFB04_010819	SW8260C	591-78-6	2-HEXANONE	UJ
SOFB04_010819	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOFB04_010819	SW8260C	67-64-1	ACETONE	UJ
SOFB04_010819	SW8260C	107-13-1	ACRYLONITRILE	UJ
SOFB04_010819	SW8260C	74-83-9	BROMOMETHANE	UJ
SOFB04_010819	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOFB04_010819	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOFB04_010819	SW8260C	87-68-3	HEXACHLOROBUTADIENE	UJ
SOTB07_010819	SW8260C	96-12-8	1,2-DIBROMO-3- CHLOROPROPANE	UJ
SOTB07_010819	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB07_010819	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB07_010819	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB07_010819	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB07_010819	SW8260C	67-64-1	ACETONE	UJ
SOTB07_010819	SW8260C	107-13-1	ACRYLONITRILE	UJ
SOTB07_010819	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB07_010819	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOTB07_010819	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ

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MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by SW-846 Method 8260C

L1852610

The initial calibration (ICAL) for instrument VOA110 exhibited a response factor (RF) below the control limit for 1,4-dioxane (0.005). The associated results in sample RB07_0-2, RB07_8-10, and RB07_10-12 are qualified as "UJ" based on potential indeterminate bias.

The continuing calibration verification (CCV) analyzed on 12/28/2018 at 7:57 exhibited a percent difference (%D) above the control limit for dichlorodifluoromethane (-38.1%), chloromethane (-34.3%), vinyl chloride (-29.2%), bromomethane (-58.3%), and carbon disulfide (20.5%). The associated results in sample RB07_0-2, RB07_8-10, and RB07_10-12 are qualified as "UJ" based on potential indeterminate bias.

L1852926

The lab control sample and lab control sample duplicate (LCS/LCSD) for batch WG1194240 exhibited a percent recovery below the lower control limit (LCL) for 2-butanone (59%, 54%) and 2-hexanone (60%, 64%). The associated results in sample RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, RB04_13-15, and SOFB01_122118 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA100 exhibited a RF below the control limit for 1,4-dioxane (0.002) and 4-methyl-2-pentanone (0.089). The associated results in sample RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, and RB04_13-15 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and 1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB01_122118 and SOFB01_122118 are qualified as "UJ" based on potential indeterminate bias.

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The ICAL for instrument CHARLIE exhibited a RF below the control limit for 1,4-dioxane (0.004). The associated results in sample RB05_0-2, SODUP01_122118, and RB04_18-20 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 8:29 exhibited a %D above the control limit for bromomethane (52.8%). The associated results in sample SOTB01_122118 and SOFB01_122118 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 12:33 exhibited a %D above the control limit for dichlorodifluoromethane (20.2%), acetone (28.3%), 2-butanone (40.9%), 2-hexanone (39.8%), styrene (20.5%), 1,2,4,5-tetramethylbenzene (22.3%), and naphthalene (20.2%). The associated results in sample RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, and RB04_13-15 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 6:48 exhibited a %D above the control limit for dichlorodifluoromethane (40.6%) and bromomethane (31.4%). The associated results in sample RB05_0-2, SODUP01_122118, and RB04_18-20 are qualified as "UJ" based on potential indeterminate bias.

L1853110

The LCSD for batch WG1194817 exhibited a percent recovery below the LCL for bromomethane (56%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA117 exhibited a RF below the control limit for acrylonitrile (0.05), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.074). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/4/2019 at 6:13 exhibited a %D above the control limit for chloromethane (28.4%), vinyl chloride (29.9%), bromomethane (42.8%), chloroethane (43.9%), and trichlorofluoromethane (25.5%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential indeterminate bias.

L1853111

The LCS/LCSD for batch WG1194605 exhibited a percent recovery below the LCL for bromomethane (42%, 46%), chloroethane (48%, 48%), trichlorofluoromethane (63%, 64%), vinyl acetate (53%, 64%), and vinyl chloride (63%, 63%). The associated results in sample

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RB03_0-2, RB03_10-12, RB12_0-2, and RB12_9-10 are qualified as "UJ" based on potential low bias.

The LCSD for batch WG1194817 exhibited a percent recovery below the LCL for bromomethane (56%). The associated results in sample RB12_8-9 are qualified as "UJ" based on potential low bias.

The field duplicate and parent sample (SODUP02_122718 and RB08_14-16) exhibited a relative percent difference (RPD) above the control limit for acetone (98%). The associated results are qualified as "J" based on potential indeterminate bias.

The ICAL for instrument VOA117 exhibited a RF below the control limit for acrylonitrile (0.05), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.074). The associated results in sample RB03_0-2, RB03_10-12, RB12_0-2, RB12_8-9, and RB12_9-10 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and 1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB02_122618 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument CHARLIE exhibited a RF below the control limit for 1,4-dioxane (0.004). The associated results in sample RB03_2-3, RB12_10-12, RB02_0-2, RB02_7-9, RB02_10-12, and RB02_13-15 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 8:29 exhibited a %D above the control limit for bromomethane (52.8%). The associated results in sample SOTB02_122618 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 16:38 exhibited a %D above the control limit for chloromethane (29.4%), vinyl chloride (36.6%), bromomethane (58.3%), chloroethane (52%), trichlorofluoromethane (36.6%), and vinyl acetate (47%). The associated results in sample RB03_0-2, RB03_10-12, RB12_0-2, and RB12_9-10 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 17:43 exhibited a %D above the control limit for dichlorodifluoromethane (40.3%), bromomethane (27.5%), 1,1-dichloroethene (22.6%), carbon disulfide (21.8%), and acrylonitrile (21.1%). The associated results in sample RB03_2-3, RB12_10-12, RB02_0-2, RB02_7-9, RB02_10-12, and RB02_13-15 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 1/4/2019 at 6:13 exhibited a %D above the control limit for chloromethane (28.4%), vinyl chloride (29.9%), bromomethane (42.8%), chloroethane (43.9%), trichlorofluoromethane (25.5%), and acrylonitrile (26%). The associated results in sample RB12_8-9 are qualified as "UJ" based on potential indeterminate bias.

L1853234

The trip blank (TB) (SOTB03_122718) exhibited a detection of acetone (1.6 ug/l). The associated results in sample SOFB02_122718 are qualified as "U" at the reporting limit based on potential blank contamination.

The ICAL for instrument ELAINE exhibited a RF below the control limit for acetone (0.053), 2-butanone (0.072), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.076). The associated results in sample SOTB03_122718 and SOFB02_122718 are qualified as "J" or "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.004). The associated results in sample RB01_0-2 and RB01_25-27 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument CHARLIE exhibited a RF below the control limit for 1,4-dioxane (0.004). The associated results in sample RB01_0-2 and RB08_10-12 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.003). The associated results in sample RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 6:28 exhibited a %D above the control limit for trichlorofluoromethane (-34.1%), 4-methyl-2-pentanone (22.5%), and 2-hexanone (29.9%). The associated results in sample RB01_0-2 and RB01_25-27 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 18:08 exhibited a %D above the control limit for dichlorodifluoromethane (40.6%), bromomethane (35.8%), chloroethane (28.5%), and trichlorofluoromethane (26.5%). The associated results in sample RB01_0-2 and RB08_10-12 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 8:32 exhibited a %D above the control limit for dichlorodifluoromethane (43.5%), chloromethane (30.9%), bromomethane (50.9%), and vinyl

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acetate (-27.1%). The associated results in sample SOTB03_122718 and SOFB02_122718 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/4/2019 at 12:27 exhibited a %D above the control limit for dichlorodifluoromethane (-23.2%). The associated results in sample RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "UJ" based on potential indeterminate bias.

L1900156

The field duplicate and parent sample (SODUP03_010219 and RB09_19-21) exhibited a RPD above the control limit for 1,2,4,5-tetramethylbenzene (72%), 1,4-diethylbenzene (70%), benzene (78%), isopropylbenzene (74%), n-butylbenzene (64%), n-propylbenzene (71%), and sec-butylbenzene (68%). The associated results are qualified as "J" based on potential indeterminate bias.

The ICAL for instrument ELAINE exhibited a RF below the control limit for acetone (0.053), 2-butanone (0.072), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.076). The associated results in sample SOTB04_010219 are qualified as "J" or "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.003). The associated results in sample RB09_0-2, RB09_19-21, RB09_28-30, RB11_0-2, RB11_19-21, RB11_28-30, and SODUP03_010219 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 8:32 exhibited a %D above the control limit for dichlorodifluoromethane (43.5%), chloromethane (30.9%), bromomethane (50.9%), vinyl acetate (-27.1%), and 2,2-dichloropropane (32.7%). The associated results in sample SOTB04_010219 are qualified as "UJ" based on potential indeterminate bias.

L1900324

The method blank (MB) for batch WG1195498 exhibited a detection of bromomethane (0.96 ug/kg). The associated results in sample RB22_3-5 are qualified as "U" at the reporting limit based on potential blank contamination.

The ICAL for instrument VOA110 exhibited a RF below the control limit for 1,4-dioxane (0.005). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, and RB19_24-25 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and

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1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB05_010319 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.003). The associated results in sample RB19_20-22 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/6/2019 at 10:13 exhibited a %D above the control limit for bromomethane (52.8) and vinyl acetate (-24). The associated results in sample SOTB05_010319 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/7/2019 at 12:47 exhibited a %D above the control limit for dichlorodifluoromethane (-45.3), chloromethane (-48.5), vinyl chloride (-38), bromomethane (-61.7), 4-ethyltoluene (20.6), 1,2,3-trichloropropane (20.4), and 1,2,4,5-tetramethylbenzene (20.3). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, and RB19_24-25 are qualified as "UJ" based on potential indeterminate bias.

L1900536

The LCS/LCSD for batch WG1195525 exhibited a percent recovery below the LCL for 1,2,3-trichlorobenzene (66%, 69%) and naphthalene (64%, 68%). The associated results in sample SOTB06_010419 are qualified as "UJ" based on potential low bias.

The LCSD for batch WG1196289 exhibited a percent recovery below the LCL for 2-hexanone (68%). The associated results in sample RB20_0-2 and RB22_20-22 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA100 exhibited a RF below the control limit for 1,4-dioxane (0.002) and 4-methyl-2-pentanone (0.089). The associated results in sample RB20_0-2 and RB22_20-22 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and 1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB06_010419 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.003). The associated results in sample RB17_8-10, RB18_0-2, and RB18_6-8 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 1/7/2019 at 7:48 exhibited a %D above the control limit for bromomethane (34.9%), 1,2,4-trichlorobenzene (22.1%), naphthalene (36%), and 1,2,3-trichlorobenzene (33.9%). The associated results in sample SOTB06_010419 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/9/2019 at 14:20 exhibited a %D above the control limit for chloromethane (-31.3%), bromomethane (-29%), 1,4-dioxane (21.2%), tert-butylbenzene (-20.1%), p-isopropyltoluene (-22.6%), and n-butylbenzene (-23.2%). The associated results in sample RB17_0-2, RB17_4-6, RB17_18-20, RB18_15-17, RB18_18-20, RB20_7-9, RB20_13-15, and RB20_18-20 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/9/2019 at 17:55 exhibited a %D above the control limit for dichlorodifluoromethane (-37.1%), vinyl chloride (-23.4%), acetone (32.6%), and 2-hexanone (28%). The associated results in sample RB20_0-2 and RB22_20-22 are qualified as "J" or "UJ" based on potential indeterminate bias.

L1900707

The LCSD for batch WG1195621 exhibited a percent recovery below the LCL for 4-chloroaniline (39%). The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_23-25, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and 1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB06_010719 and SOFB03_010719 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA111 exhibited a RF below the control limit for 4-methyl-2-pentanone (0.087). The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_23-25, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/8/2019 at 7:13 exhibited a %D above the control limit for dichlorodifluoromethane (27.9%), bromomethane (46.2%), trichlorofluoromethane (20.3%), freon-113 (21.5%), naphthalene (20.1%), and 1,2,3-trichlorobenzene (22.2%). The associated results in sample SOTB06_010719 and SOFB03_010719 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 1/10/2019 at 6:46 exhibited a %D above the control limit for 1,2-dichloroethane (21.4%). The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_23-25, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential indeterminate bias.

L1900879

The LCS/LCSD for batch WG1195687 exhibited a RPD above the control limit for hexachlorobutadiene (33%). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

The LCS/LCSD for batch WG1196485 exhibited a percent recovery below the LCL for bromomethane (37%, 37%) and 1,4-dioxane (30%). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1196736 exhibited a percent recovery below the LCL for 2-butanone (60%, 58%) and 2-hexanone (69%, 64%). The associated results in sample RB10_0-2, RB10_33-35, RB16_0-2, RB16_13-15, and RB16_18-20 are qualified as "UJ" based on potential low bias.

The field duplicate and parent sample (SODUP05_010819 and RB15_23-25) exhibited a RPD above the control limit for benzene (74%) and n-propylbenzene (65%). The associated results are qualified as "J" based on potential indeterminate bias.

The ICAL for instrument VOA105 exhibited a RF below the control limit for acetone (0.02), acrylonitrile (0.026), 2-butanone (0.031), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.035), 2-hexanone (0.054), and 1,2-dibromo-3-chloropropane (0.033). The associated results in sample SOTB07_010819 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA122 exhibited a RF below the control limit for acrylonitrile (0.043), 2-butanone (0.057), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.065). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA100 exhibited a RF below the control limit for 1,4-dioxane (0.002) and 4-methyl-2-pentanone (0.089). The associated results in sample RB10_0-2, RB10_33-35, RB16_0-2, RB16_13-15, and RB16_18-20 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA117 exhibited a RF below the control limit for acrylonitrile (0.037) and 1,4-dioxane (0.002). The associated results in sample RB10_18-20, RB15_0-2, RB15_18-20,

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RB15_23-25, SODUP05_010819, and RB15_28-30 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/9/2019 at 9:26 exhibited a %D above the control limit for dichlorodifluoromethane (35.7%), chloromethane (26.3%), and bromomethane (26.4%). The associated results in sample SOTB07_010819 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/10/2019 at 10:27 exhibited a %D above the control limit for dichlorodifluoromethane (38.2%), chloromethane (35%), bromomethane (63.1%), acetone (38.3%), 2-hexanone (23.6%), and hexachlorobutadiene (34.6%). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/10/2019 at 17:55 exhibited a %D above the control limit for 2-hexanone (20.3%). The associated results in sample RB10_18-20, RB15_0-2, and SODUP05_010819 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/10/2019 at 18:23 exhibited a %D above the control limit for acetone (26%), acrylonitrile (24%), vinyl acetate (20.1%), 2-butanone (40.5%), and 2-hexanone (31.1%). The associated results in sample RB10_0-2, RB10_33-35, RB16_0-2, RB16_13-15, and RB16_18-20 are qualified as "UJ" based on potential indeterminate bias.

SVOCs by SW-846 Method 8270D and 8270C-SIM:

L1852610

The LCS/LCSD for batch WG1192476 exhibited a RPD above the control limit for benzoic acid (65%). The associated results in sample RB07_10-12 are qualified as "UJ" based on potential indeterminate bias.

The LCS for batch WG1193985 exhibited a percent recovery below the LCL for 4-chloroaniline (35%). The associated results in sample RB07_0-2 and RB07_8-10 are qualified as "UJ" based on potential low bias.

L1852926

The LCS/LCSD for batch WG1192882 exhibited a RPD above the control limit for 3,3'-dichlorobenzidine (39%). The associated results in sample SOFB01_122118 are qualified as "UJ" based on potential indeterminate bias.

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The LCS/LCSD for batch WG1192882 exhibited a percent recovery below the LCL for 2,4-dimethylphenol (29%). The associated results in sample SOFB01_122118 are qualified as "UJ" based on potential low bias.

The CCV analyzed on 12/29/2018 at 22:30 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (21.5%) and hexachlorocyclopentadiene (21.6%). The associated results in sample RB05_0-2, RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, RB04_13-15, SODUP01_122118, and RB04_18-20 are qualified as "UJ" based on potential indeterminate bias.

L1853110

The LCSD for batch WG1193175 exhibited a percent recovery below the LCL for phenol (93%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential low bias.

L1853234

The LCSD for batch WG1193790 exhibited a percent recovery below the LCL for 2,4-dimethylphenol (29%), 3,3'-dichlorobenzidine (35%), and 4-chloroaniline (38%). The associated results in sample SOFB02_122718 are qualified as "UJ" based on potential low bias.

The LCSD for batch WG1194326 exhibited a percent recovery below the LCL for ethyl ether (65%). The associated results in sample RB01_0-2 and RB08_10-12 are qualified as "UJ" based on potential low bias.

The sample SOFB02_122718 was extracted outside of the holding time by 1 day. The associated results are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 22:17 exhibited a %D above the control limit for benzoic acid (21.1%). The associated results in sample SOFB02_122718 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/6/2019 at 19:32 exhibited a %D above the control limit for 2-nitrophenol (-34.3%), 2-nitroaniline (-23.2%), and pentachlorophenol (-23.4%). The associated results in sample RB01_14-15 and RB01_9-11 are qualified as "UJ" based on potential indeterminate bias.

L1900156

The LCS/LCSD for batch WG1194535 exhibited a percent recovery above the upper control limit (UCL) for biphenyl (106%, 110%). The associated results in sample SODUP03_010219 are qualified as "J" based on potential high bias.

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The field duplicate and parent sample (SODUP03_010219 and RB09_19-21) exhibited a RPD above the control limit for 2-methylnaphthalene (86%), fluoranthene (68%), naphthalene (107%), phenanthrene (70%), and pyrene (69%). The associated results are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 1/8/2019 at 6:45 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (21). The associated results in sample SODUP03_010219 and RB11_19-21 are qualified as "UJ" based on potential indeterminate bias.

L1900324

The CCV analyzed on 1/5/2019 at 10:06 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (21.9%), 2-nitrophenol (-28.1%), 4,6-dinitro-o-cresol (-23%), di-n-butylphthalate (-20.6%), butyl benzyl phthalate (-35%), bis(2-ethylhexyl)phthalate (-22.4%), and di-n-octylphthalate (-22.4%). The associated results in sample RB21_2-4 are qualified as "UJ" based on potential indeterminate bias.

L1900536

The CCV analyzed on 1/7/2019 at 7:21 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (20.3%), 2,4-dinitrophenol (-31.6%), pentachlorophenol (-20.9%), butyl benzyl phthalate (-26.5%), and di-n-octylphthalate (-34.2%). The associated results in sample RB17_0-2, RB17_18-20, RB18_15-17, RB18_18-20, RB20_7-9, RB20_13-15, RB20_18-20, and RB22_20-22 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/7/2019 at 13:14 exhibited a %D above the control limit for hexachlorocyclopentadiene (20.5%). The associated results in sample RB17_4-6, RB17_8-10, RB20_0-2 are qualified as "UJ" based on potential indeterminate bias.

L1900707

The CCV analyzed on 1/9/2019 at 14:05 exhibited a %D above the control limit for 2,4-dinitrotoluene (-42.7%). The associated results in sample SOFB03_010719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/10/2019 at 12:11 exhibited a %D above the control limit for 2,4-dinitrophenol (26.9%). The associated results in sample RB13_22-24 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 1/11/2019 at 7:37 exhibited a %D above the control limit for 4-nitroaniline (23.1%). The associated results in sample RB14_33-35 and SODUP04_010719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/11/2019 at 17:01 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (21.5%) and bis(2-chloroethoxy)methane (20.6%). The associated results in sample RB14_23-25 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/9/2019 at 11:44 exhibited a %D above the control limit for pentachlorophenol (23.2%). The associated results in sample SOFB03_010719 are qualified as "UJ" based on potential indeterminate bias.

L1900879

The field duplicate and parent sample (SODUP05_010819 and RB15_23-25) exhibited a RPD above the control limit for 2-methylnaphthalene (173%) and naphthalene (183%). The associated results are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 1/11/2019 at 7:54 exhibited a %D above the control limit for butyl benzyl phthalate (-35.2%). The associated results in sample RB10_0-2, RB10_18-20, RB15_0-2, and RB16_13-15 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/11/2019 at 11:59 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (22.7%). The associated results in sample RB16_18-20 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/13/2019 at 12:54 exhibited a %D above the control limit for benzoic acid (20.9%), 2,4-dinitrophenol (21.9%), pentachlorophenol (26.9%), and pentachlorophenol (26.9%). The associated results in sample RB15_18-20 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/14/2019 at 14:26 exhibited a %D above the control limit for p-chloro-m-cresol (-23.1%), dimethyl phthalate (-25.1%), acenaphthylene (-21.3%), and 4-nitrophenol (-32.7%). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/14/2019 at 18:09 exhibited a %D above the control limit for benzo(b)fluoranthene (20.3%). The associated results in sample RB10_18-20 are qualified as "J" based on potential indeterminate bias.

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Herbicides by SW-846 Method 8151A

L1853111

The sample RB01_9-11 exhibited a percent recovery below the LCL for the surrogate DCAA (11%). The associated results are qualified as "UJ" based on potential low bias.

L1900156

The sample SODUP03_010219 exhibited a percent recovery below the LCL for the surrogate DCAA (0%, (0%). The associated results are qualified as "UJ" based on potential low bias.

L1900879

The CCV analyzed on 1/15/2019 at 12:43 exhibited a %D above the control limit for 2,4,5-t (-15.3%). The associated results in sample RB15_18-20, RB15_23-25, RB16_0-2, RB16_13-15, RB16_18-20, and SODUP05_010819 are qualified as "UJ" based on potential indeterminate bias.

PCBs by SW-846 Method 8082A

L1852926

The sample RB04_0-2 exhibited a dual column imprecision for Aroclor 1260. The associated results are qualified as "J" based on potential indeterminate bias.

L1853111

The sample RB12_8-9 exhibited a dual column imprecision for Aroclor 1260. The associated results are qualified as "J" based on potential indeterminate bias.

Pesticides by SW-846 Method 8081B

L1852610

The sample RB07_0-2 exhibited a dual column imprecision for cis-chlordane, dieldrin, endosulfan sulfate, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB07_8-10 exhibited a dual column imprecision for cis-chlordane and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB07_10-12 exhibited a dual column imprecision for 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

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L1852926

The sample SOFB01_122118 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (17%, 17%), decachlorobiphenyl (13%, 13%). The associated results are qualified as "UJ" based on potential low bias.

The sample RB05_0-2 exhibited a dual column imprecision for cis-chlordane and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB05_8-10 exhibited a dual column imprecision for trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB06_0-2 exhibited a dual column imprecision for 4,4'-DDD, cis-chlordane, heptachlor epoxide, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB06_8-10 exhibited a dual column imprecision for cis-chlordane and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB04_0-2 exhibited a dual column imprecision for 4,4'-DDD, heptachlor epoxide, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 12/28/2018 at 10:43 exhibited a %D above the control limit for chlordane. The associated results in sample RB05_0-2, RB05_8-10, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, and SODUP01_122118 are qualified as "UJ" based on potential indeterminate bias.

L1853111

The CCV analyzed on 1/4/2019 at 9:09 exhibited a %D above the control limit for toxaphene. The associated results in sample RB03_17-18 are qualified as "UJ" based on potential indeterminate bias.

L1853111

The sample RB02_10-12 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (254%). The associated results are qualified as "J" based on potential high bias.

The sample RB03_0-2 exhibited a dual column imprecision for endosulfan II and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

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The sample RB12_0-2 exhibited a dual column imprecision for endosulfan II and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB12_9-10 exhibited a dual column imprecision for endrin and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB01_0-2 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (183%). The associated results are qualified as "J" based on potential high bias.

The sample RB01_25-27 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1270%). The associated results are qualified as "J" based on potential high bias.

The sample RB01_0-2 exhibited a dual column imprecision for endosulfan II. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB08_0-2 exhibited a dual column imprecision for 4,4'-DDE, 4,4'-DDT, and cis-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 12/30/2018 at 15:29 exhibited a %D above the control limit for toxaphene. The associated results in sample RB03_0-2, RB03_2-3, RB12_0-2, RB12_9-10, RB12_10-12, and RB02_0-2 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 9:37 exhibited a %D above the control limit for endosulfan sulfate (30.6%). The associated results in sample RB02_10-12 and RB02_13-15 are qualified as "UJ" based on potential indeterminate bias.

L1853234

The CCV analyzed on 1/2/2019 at 9:37 exhibited a %D above the control limit for endosulfan sulfate (30.6%). The associated results in sample SOFB02_122718 are qualified as "UJ" based on potential indeterminate bias.

L1900156

The LCS/LCSD for batch WG1194454 exhibited a RPD above the control limit for 4,4'-DDD (46%), 4,4'-DDE (37%), 4,4'-DDT (46%), aldrin (43%), alpha-BHC (49%), beta-BHC (36%), delta-BHC (44%), dieldrin (46%), endosulfan I (41%), endosulfan II (44%), endosulfan sulfate (36%), endrin (43%), endrin aldehyde (45%), endrin ketone (42%), heptachlor (44%), heptachlor epoxide (42%), lindane (44%), methoxychlor (47%), cis-chlordane (33%), and trans-chlordane (50%). The associated results in sample RB09_0-2, RB09_19-21, RB09_28-30, RB11_0-2, RB11_19-21,

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RB11_28-30, and SODUP03_010219 are qualified as "J" or "UJ" based on potential indeterminate bias.

L1900324

The sample RB21_0-2 exhibited a dual column imprecision for endosulfan II. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB21_18-20 exhibited a dual column imprecision for endosulfan II. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB22_3-5 exhibited a dual column imprecision for 4,4'-DDE. The associated results are qualified as "J" based on potential indeterminate bias.

L1900536

The sample RB17_4-6 exhibited a percent recovery below the LCL for the surrogate decachlorobiphenyl (29%). The associated results are qualified as "UJ" based on potential low bias.

The sample RB18_0-2 exhibited a dual column imprecision for trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

L1900707

The CCV analyzed on 1/10/2019 at 10:14 exhibited a %D above the control limit for toxaphene. The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/14/2019 at 16:33 exhibited a %D above the control limit for toxaphene. The associated results in sample RB14_23-25 are qualified as "UJ" based on potential indeterminate bias.

L1900879

The CCV analyzed on 1/10/2019 at 10:14 exhibited a %D above the control limit for toxaphene. The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

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Metals by SW-846 Method 6010D

L1852610

The laboratory duplicate and parent sample (RB07_0-2) exhibited a RPD above the control limit for zinc, total (28%). The associated results are qualified as "J" based on potential indeterminate bias.

The matrix spike (MS) for batch WG1192853 exhibited a percent recovery below the LCL for barium, total (18%) and lead, total (11%). The associated results in sample RB07_0-2, RB07_8-10, and RB07_10-12 are qualified as "J" based on potential low bias.

L1852926

The MB for batch WG1194043 exhibited a detection of copper, total (0.004 mg/l). The associated results in sample SOFB01_122118 are qualified as "U" at the reporting limit based on potential blank contamination.

The laboratory duplicate and parent sample (RB05_0-2) exhibited a RPD above the control limit for iron, total (22%). The associated results are qualified as "J" based on potential indeterminate bias.

The field duplicate and parent sample (SODUP01_122118 and RB04_8-10) exhibited a RPD above the control limit for lead, total (76%). The associated results are qualified as "J" based on potential indeterminate bias.

L1853111

The MS and matrix spike duplicate (MSD) for batch WG1193639 exhibited a percent recovery below the LCL for calcium, total (59%, 43%), lead, total (68%, 64%), potassium, total (126%), copper, total (71%), and zinc, total (72%). The associated results in sample RB01_0-2, RB01_14-15, RB01_25-27, RB08_0-2, RB08_10-12, RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "J" based on potential low bias.

The field duplicate and parent sample (SODUP02_122718 and RB08_14-16) exhibited a RPD above the control limit for calcium, total (66%). The associated results are qualified as "J" based on potential indeterminate bias.

L1853234

The MB for batch WG1194043 exhibited a detection of copper, total (0.004 mg/l). The associated results in sample SOFB02_122718 are qualified as "U" at the reporting limit based on potential blank contamination.

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L1900156

The MB for batch WG1194304 exhibited a detection of selenium, total (0.128 mg/kg). The associated results in sample RB09_0-2, RB09_19-21, RB09_28-30, RB11_0-2, RB11_19-21, and SODUP03_010219 are qualified as "U" at the reporting limit based on potential blank contamination.

The field duplicate and parent sample (SODUP03_010219 and RB09_19-21) exhibited a RPD above the control limit for barium, total (74%) and lead, total (111%). The associated results are qualified as "J" based on potential indeterminate bias.

L1900324

The MS/MSD for batch WG1194873 exhibited a RPD above the control limit for arsenic, total (34%). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, RB19_20-22, and RB19_24-25 are qualified as "J" based on potential indeterminate bias.

The MS/MSD for batch WG1194873 exhibited a percent recovery below the LCL for antimony, total (74%), chromium, total (74%), thallium, total (70%, 69%). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, RB19_20-22, and RB19_24-25 are qualified as "J" or "UJ" based on potential low bias.

The MS/MSD for batch WG1194873 exhibited a percent recovery above the UCL for potassium, total (138%). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, RB19_20-22, and RB19_24-25 are qualified as "J" based on potential high bias.

L1900536

The MS for batch WG1195822 exhibited a percent recovery below the LCL for arsenic, total (72%), barium, total (73%), and chromium, total (72%). The associated results in sample RB17_0-2, RB17_4-6, RB17_8-10, RB17_18-20, RB18_0-2, RB18_6-8, RB18_15-17, RB18_18-20, RB20_0-2, RB20_7-9, RB20_13-15, RB20_18-20, and RB22_20-22 are qualified as "J" or "UJ" based on potential low bias.

The laboratory duplicate and parent sample (RB17_0-2) exhibited a RPD above the control limit for arsenic, total (79%), cadmium, total (27%), calcium, total (37%), chromium, total (30%), copper, total (133%), iron, total (51%), magnesium, total (34%), nickel, total (25%), and potassium, total (24%). The associated results are qualified as "J" based on potential indeterminate bias.

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L1900707

The MB for batch WG1195823 exhibited a detection of selenium, total (0.128 mg/kg). The associated results in sample RB13_0-2, RB13_18-20, RB13_33-35, and RB14_0-2 are qualified as "U" at the reporting limit based on potential blank contamination.

The MSD for batch WG1196431 exhibited a percent recovery above the UCL for magnesium, total (163%), manganese, total (151%), and potassium, total (126%). The associated results in sample RB13_22-24 are qualified as "J" based on potential high bias.

L1900879

The MB for batch WG1196160 exhibited a detection of antimony, total (0.152 mg/kg). The associated results in sample RB10_0-2, RB10_18-20, and RB15_18-20 are qualified as "U" at the reporting limit based on potential blank contamination.

Mercury by SW-846 Method 7471B

L1852610

The MB for batch WG1192315 exhibited a detection of mercury, total (0.019 mg/kg). The associated results in sample RB07_0-2 and RB07_8-10 are qualified as "U" at the sample concentration based on potential blank contamination.

L1852926

The field duplicate and parent sample (SODUP01_122118 and RB04_8-10) exhibited a RPD above the control limit for mercury, total (79%). The associated results are qualified as "J" based on potential indeterminate bias.

L1853111

The field duplicate and parent sample (SODUP02_122718 and RB08_14-16) exhibited a RPD above the control limit for mercury, total (168%). The associated results are qualified as "J" based on potential indeterminate bias.

Cyanide by SW-846 Method 9012B

L1852610

The LCS/LCSD for batch WG1192409 exhibited a percent recovery below the LCL for cyanide, total (71%, 77%). The associated results in sample RB07_0-2, RB07_8-10, and RB07_10-12 are qualified as "UJ" based on potential low bias.

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L1852926

The LCS/LCSD for batch WG1192428 exhibited a percent recovery below the LCL for cyanide, total (73%, 78%). The associated results in sample RB05_0-2, RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, and RB04_0-2 are qualified as "J" or "UJ" based on potential low bias.

The LCSD for batch WG1192704 exhibited a percent recovery below the LCL for cyanide, total (72%). The associated results in sample RB04_8-10, RB04_13-15, SODUP01_122118, and RB04_18-20 are qualified as "J" or "UJ" based on potential low bias.

L1853110

The LCS/LCSD for batch WG1193398 exhibited a percent recovery below the LCL for cyanide, total (65%, 65%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential low bias.

L1853111

The LCS for batch WG1193065 exhibited a percent recovery below the LCL for cyanide, total (66%). The associated results in sample RB03_0-2, RB03_2-3, RB03_10-12, RB12_0-2, RB12_8-9, and RB12_9-10 are qualified as "J" or "UJ" based on potential low bias.

The LCS for batch WG1193067 exhibited a percent recovery below the LCL for cyanide, total (65%). The associated results in sample RB12_10-12, RB02_0-2, RB02_7-9, RB02_10-12, and RB02_13-15 are qualified as "J" or "UJ" based on potential low bias.

L1853234

The LCSD for batch WG1193512 exhibited a percent recovery below the LCL for cyanide, total (73%). The associated results in sample RB01_0-2, RB01_14-15, RB01_25-27, RB08_0-2, RB08_10-12, RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "J" or "UJ" based on potential low bias.

L1900156

The LCS/LCSD for batch WG1194383 exhibited a percent recovery below the LCL for cyanide, total (68%, 72%). The associated results in sample RB09_0-2, RB09_19-21, RB09_28-30, RB11_0-2, RB11_19-21, RB11_28-30, and SODUP03_010219 are qualified as "UJ" based on potential low bias.

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L1900324

The LCS/LCSD for batch WG1194787 exhibited a percent recovery below the LCL for cyanide, total (48%, 46%). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, RB19_20-22, and RB19_24-25 are qualified as "J" or "UJ" based on potential low bias.

L1900536

The LCS for batch WG1195200 exhibited a percent recovery below the LCL for cyanide, total (79%). The associated results in sample RB17_0-2, RB17_4-6, RB17_8-10, and RB17_18-20 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1195222 exhibited a percent recovery below the LCL for cyanide, total (68%, 67%). The associated results in sample RB18_0-2, RB18_6-8, RB18_15-17, RB18_18-20, RB20_0-2, RB20_7-9, RB20_13-15, and RB22_20-22 are qualified as "J" or "UJ" based on potential low bias.

The LCS/LCSD for batch WG1195616 exhibited a percent recovery below the LCL for cyanide, total (60%, 62%). The associated results in sample RB20_18-20 are qualified as "UJ" based on potential low bias.

L1900707

The LCS/LCSD for batch WG1195617 exhibited a percent recovery below the LCL for cyanide, total (60%, 62%). The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_23-25, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential low bias.

L1900879

The LCS/LCSD for batch WG1196013 exhibited a percent recovery below the LCL for cyanide, total (50%, 75%). The associated results in sample RB10_0-2, RB10_18-20, RB10_33-35, RB15_0-2, RB15_18-20, RB15_23-25, RB16_0-2, RB16_13-15, RB16_18-20, and SODUP05_010819 are qualified as "J" or "UJ" based on potential low bias.

The LCS/LCSD for batch WG1196064 exhibited a RPD above the control limit for cyanide, total (39%). The associated results in sample RB15_28-30 are qualified as "UJ" based on potential indeterminate bias.

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Hexavalent Chromium by SW-846 Method 7196A

L1852926

The MS for batch WG1192810 exhibited a percent recovery below the LCL for chromium, hexavalent (0%). The associated results in sample RB05_0-2, RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, and RB04_13-15 are qualified as "J" or "UJ" based on potential low bias.

L1853110

The MS for batch WG1193256 exhibited a percent recovery below the LCL for chromium, hexavalent (0%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential low bias.

L1853111

The MS for batch WG1193259 exhibited a percent recovery below the LCL for chromium, hexavalent (59%). The associated results in sample RB02_13-15 are qualified as "UJ" based on potential low bias.

The MS/MSD for batch WG1193635 exhibited a RPD above the control limit for chromium, hexavalent (3.3%). The associated results in sample RB01_0-2, RB01_14-15, RB01_25-27, RB08_0-2, RB08_10-12, RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "UJ" based on potential indeterminate bias.

L1900879

The LCS for batch WG1196213 exhibited a percent recovery below the LCL for chromium, hexavalent (79%). The associated results in sample RB10_0-2, RB10_18-20, RB10_33-35, RB15_0-2, RB15_18-20, RB15_23-25, RB16_0-2, RB16_13-15, RB16_18-20, and SODUP05_010819 are qualified as "J" or "UJ" based on potential low bias.

The LCS for batch WG1196215 exhibited a percent recovery below the LCL for chromium, hexavalent (79%). The associated results in sample RB15_28-30 are qualified as "J" based on potential low bias.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

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VOCs by SW-846 Method 8260C

L1852610

The MB for batch WG1193693 exhibited a detection of bromomethane (0.95 ug/kg). The associated results are non-detections. No qualification is necessary.

The LCS/LCSD for batch WG1193693 exhibited a percent recovery above the UCL for bromomethane (158%, 153%) and chloromethane (134%). The associated results are non-detections. No qualification is necessary.

L1853111

The sample RB03_0-2 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (158%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB03_2-3 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (133%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB03_2-3 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (141%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB12_8-9 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB01_14-15 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

L1853234

The MB for batch WG1195020 exhibited a detection of bromomethane (0.9 ug/kg). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1195021 exhibited a detection of bromomethane (45 ug/kg). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1195241 exhibited a detection of bromomethane (0.62 ug/kg). The associated results are non-detections. No qualification is necessary.

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The LCS/LCSD for batch WG1194582 exhibited a percent recovery above the UCL for 2-butanone (140%, 140%). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1194141 exhibited a percent recovery below the LCL for 1,1,1,2-tetrachloroethane (51%, 51%), 1,1,2,2-tetrachloroethane (44%, 45%), 1,1,2-trichloroethane (55%, 56%), 1,2,3-trichlorobenzene (18%, 23%), 1,2,3-trichloropropane (48%, 49%), 1,2,4,5-tetramethylbenzene (32%, 35%), 1,2,4-trichlorobenzene (20%, 24%), 1,2,4-trimethylbenzene (44%, 42%), 1,2-dibromo-3-chloropropane (41%, 42%), 1,2-dibromoethane (46%, 46%), 1,2-dichlorobenzene (34%, 35%), 1,2-dichloroethane (59%, 61%), 1,2-dichloropropane (63%, 66%), 1,3,5-trimethylbenzene (48%, 45%), 1,3-dichlorobenzene (34%, 35%), 1,3-dichloropropane (52%, 53%), 1,4-dichlorobenzene (32%, 32%), 1,4-dioxane (57%, 54%), 2-butanone (62%, 61%), 2-hexanone (42%, 43%), 4-methyl-2-pentanone (48%, 49%), acetone (43%), acrylonitrile (47%, 47%), bromobenzene (41%, 41%), bromochloromethane (69%, 69%), bromodichloromethane (59%, 61%), bromoform (43%, 42%), carbon tetrachloride (62%), chlorobenzene (49%, 48%), dibromochloromethane (48%, 48%), dibromomethane (59%, 60%), ethylbenzene (54%, 52%), hexachlorobutadiene (28%, 32%), isopropylbenzene (53%, 52%), methylene chloride (65%, 69%), naphthalene (20%, 26%), styrene (27%, 30%), tetrachloroethene (61%, 64%), toluene (60%, 60%), trichloroethene (66%), vinyl acetate (19%, 21%), cis-1,2-dichloroethene (64%), cis-1,3-dichloropropene (43%, 44%), n-butylbenzene (38%, 36%), n-propylbenzene (48%, 45%), o-chlorotoluene (49%, 47%), o-xylene (53%, 50%), p-chlorotoluene (39%, 38%), 1,4-diethylbenzene (38%, 35%), 4-ethyltoluene (45%, 41%), p-isopropyltoluene (44%, 41%), p/m-xylene (53%, 50%), sec-butylbenzene (44%, 43%), tert-butylbenzene (49%, 48%), trans-1,2-dichloroethene (64%), trans-1,3-dichloropropene (36%, 37%), and trans-1,4-dichloro-2-butene (17%, 15%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

L1900156

The MB for batch WG1195272 exhibited a detection of bromomethane (39 ug/kg). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1195274 exhibited a detection of bromomethane (0.77 ug/kg). The associated results are non-detections. No qualification is necessary.

The TB (SOTB04_010219) exhibited a detection of acetone (2.1 ug/l). The associated results are non-detections. No qualification is necessary.

The LCS/LCSD for batch WG1194582 exhibited a percent recovery above the UCL for 2-butanone (140%, 140%). The associated results are non-detections. No qualification is necessary.

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The sample RB11_19-21 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (165%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample SODUP03_010219 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

L1900324

The MB for batch WG1195747 exhibited a detection of bromomethane (33 ug/kg). The associated results are non-detections. No qualification is necessary.

The LCS/LCSD for batch WG1195498 exhibited a percent recovery above the UCL for bromomethane (162%, 164%), chloromethane (149%, 149%), and vinyl chloride (138%, 138%). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1195498 exhibited a RPD above the control limit for 1,2,3-trichlorobenzene (48%), 1,2,4,5-tetramethylbenzene (66%), 1,2,4-trichlorobenzene (49%), 1,2,4-trimethylbenzene (53%), 1,2-dichlorobenzene (43%), 1,3,5-trimethylbenzene (49%), 1,3-dichlorobenzene (51%), 1,4-dichlorobenzene (68%), bromobenzene (37%), chlorobenzene (31%), ethylbenzene (35%), hexachlorobutadiene (40%), isopropylbenzene (44%), styrene (36%), n-butylbenzene (68%), n-propylbenzene (56%), o-chlorotoluene (47%), o-xylene (32%), p-chlorotoluene (54%), 1,4-diethylbenzene (68%), 4-ethyltoluene (57%), p-isopropyltoluene (62%), p/m-xylene (37%), sec-butylbenzene (54%), and tert-butylbenzene (46%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1195498 exhibited a percent recovery below the LCL for 1,1,2,2-tetrachloroethane (67%), 1,1-dichloroethene (57%, 58%), 1,2,3-trichloropropane (66%), carbon disulfide (54%), naphthalene (45%, 59%), and vinyl acetate (46%, 40%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1195498 exhibited a percent recovery above the UCL for bromomethane (161%), chloroethane (179%, 180%), chloromethane (166%, 176%), and dichlorodifluoromethane (179%, 186%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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L1900536

The LCS for batch WG1196197 exhibited a percent recovery above the UCL for chloromethane (131%). The associated results are non-detections. No qualification is necessary.

The sample RB18_6-8 exhibited a percent recovery below the LCL for the surrogate 2,4,6-tribromophenol (0%) and 2,4,6-tribromophenol (0%). The other two acid extractable surrogates were recovered within the control limits. No qualification is necessary.

L1900707

The MB for batch WG1196396 exhibited a detection of bromomethane (0.91 ug/kg). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1196507 exhibited a detection of bromomethane (46 ug/kg). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1195621 exhibited a percent recovery above the UCL for 1,2,4,5-tetrachlorobenzene (120%), 1,2,4-trichlorobenzene (110%), biphenyl (120%, 110%), bis(2-chloroethoxy)methane (120%), hexachloroethane (180%, 180%), n-nitrosodi-n-propylamine (130%, 130%), and p-chloro-m-cresol (120%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1196507 exhibited a percent recovery above the UCL for 1,1,2-trichloroethane (347%, 294%), 4-methyl-2-pentanone (137%, 132%), and acrylonitrile (148%, 137%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1196507 exhibited a percent recovery below the LCL for 1,2,4,5-tetramethylbenzene (58%, 39%), 1,3,5-trimethylbenzene (61%), 1,4-dichlorobenzene (68%), hexachlorobutadiene (62%, 56%), isopropylbenzene (62%), n-butylbenzene (55%, 37%), n-propylbenzene (55%, 24%), 1,4-diethylbenzene (69%, 53%), 4-ethyltoluene (58%), p-isopropyltoluene (60%), and sec-butylbenzene (62%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1196507 exhibited a RPD above the control limit for 2-butanone (62%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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The sample RB13_22-24 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB14_18-20 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (149%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB14_23-25 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (131%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample SODUP04_010719 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (147%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

L1900879

The MS/MSD for batch WG1196736 exhibited a percent recovery below the LCL for 1,2,3-trichlorobenzene (68%, 62%), 1,2,4,5-tetramethylbenzene (61%), 1,2,4-trichlorobenzene (67%, 60%), 1,2,4-trimethylbenzene (69%), 1,3-dichlorobenzene (69%), 1,4-dichlorobenzene (65%), 2-butanone (66%, 65%), 2-hexanone (63%, 61%), 4-methyl-2-pentanone (69%), hexachlorobutadiene (51%), naphthalene (69%, 66%), n-butylbenzene (59%), p-chlorotoluene (67%), 1,4-diethylbenzene (59%), 4-ethyltoluene (69%), p-isopropyltoluene (66%), and trans-1,4-dichloro-2-butene (68%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

SVOCs by SW-846 Method 8270D and 8270C-SIM

L1852926

The MB for batch WG1192883 exhibited a detection of anthracene (0.01 ug/l). The associated results are non-detections. No qualification is necessary.

L1853111

The MS/MSD for batch WG1193399 exhibited a percent recovery below the LCL for 2,4-dinitrophenol (0%), 4,6-dinitro-o-cresol (9.2%, 6.4%), and benzoic acid (0%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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L1853234

The MB for batch WG1194717 exhibited a detection of 2-methylnaphthalene (0.07 ug/l), acenaphthene (0.02 ug/l), and naphthalene (0.22 ug/l). The associated results are non-detections. No qualification is necessary.

L1900156

The LCS/LCSD for batch WG1194535 exhibited a percent recovery above the UCL for phenol (94%, 98%) and p-chloro-m-cresol (110%, 117%). The associated results are non-detections. No qualification is necessary.

L1900324

The MS/MSD for batch WG1194798 exhibited a percent recovery below the LCL for benzoic acid (0%) and hexachlorocyclopentadiene (20%, 22%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

L1900536

The LCS/LCSD for batch WG1195147 exhibited a percent recovery above the UCL for 2,4-dinitrophenol (135%), benzoic acid (122%, 125%), and pentachlorophenol (112%). The associated results are non-detections. No qualification is necessary.

The LCS for batch WG1196046 exhibited a percent recovery above the UCL for o-chlorotoluene (132%). The associated results are non-detections. No qualification is necessary.

The sample RB18_6-8 exhibited a percent recovery below the LCL for the surrogate 2-fluorophenol (6%) and 2-fluorophenol (11%). The other two acid extractable surrogates were recovered within the control limits. No qualification is necessary.

L1900707

The MB for batch WG1195689 exhibited a detection of benzo(k)fluoranthene (0.01 ug/l), chrysene (0.01 ug/l), fluoranthene (0.02 ug/l), phenanthrene (0.03 ug/l), and pyrene (0.02 ug/l). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1195621 exhibited a percent recovery below the LCL for 2,4-dinitrophenol (0%), 2-methylnaphthalene (0%), 4,6-dinitro-o-cresol (0%), acetophenone (0%), benzoic acid (0%), naphthalene (0%), nitrobenzene (39%), and phenol (96%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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The sample RB13_22-24 exhibited a percent recovery above the UCL for the surrogate nitrobenzene-d5 (239%). The other two base/neutral surrogates were recovered within the control limits. No qualification is necessary.

The sample RB14_23-25 exhibited a percent recovery above the UCL for the surrogate nitrobenzene-d5 (268%). The other two base/neutral surrogates were recovered within the control limits. No qualification is necessary.

L1900879

The LCS for batch WG1196086 exhibited a percent recovery above the UCL for 1,4-dioxane (170%). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1196039-4 exhibited a percent recovery below the LCL for benzoic acid (0%) and 4-chloroaniline (39%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

Herbicides by SW-846 Method 8151A

L1852926

The sample RB04_13-15 exhibited a percent recovery above the UCL for the surrogate DCAA (159%). The associated results are non-detections. No qualification is necessary.

L1853111

The sample RB03_10-12 exhibited a percent recovery above the UCL for the surrogate DCAA (199%). The associated results are non-detections. No qualification is necessary.

The sample RB02_7-9 exhibited a percent recovery below the LCL for the surrogate DCAA (0%, 0%). The sample was diluted >10X. No qualification is necessary.

L1900156

The sample RB09_19-21 exhibited a percent recovery above the UCL for the surrogate DCAA (187%). The associated results are non-detections. No qualification is necessary.

PCBs by SW-846 Method 8082A

L1900707

The MS/MSD for batch WG1195268 exhibited a percent recovery below the LCL for Aroclor 1016 (37.1%, 37.6%) and Aroclor 1260 (39.7%, 38.4%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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Pesticides by SW-846 Method 8081B

L1852926

The MB for batch WG1193824 exhibited a detection of 4,4'-DDT (0.025 ug/l). The associated results are non-detections. No qualification is necessary.

The sample RB05_13-15 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 1%), decachlorobiphenyl (2%, 3%). The sample was diluted >10X. No qualification is necessary.

The sample RB05_19-21 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (4%, 5%), decachlorobiphenyl (6%, 7%). The sample was diluted >10X. No qualification is necessary.

The sample RB04_13-15 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (8%, 9%), decachlorobiphenyl (10%, 11%). The sample was diluted >10X. No qualification is necessary.

The sample RB04_18-20 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 1%), decachlorobiphenyl (2%, 3%). The sample was diluted >10X. No qualification is necessary.

L1853110

The sample RB03_17-18 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1%, 2%), decachlorobiphenyl (3%, 4%). The sample was diluted >10X. No qualification is necessary.

L1853111

The sample RB03_10-12 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

The sample RB12_8-9 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

The sample RB12_10-12 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (322%). The associated results are non-detections. No qualification is necessary.

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The sample RB02_13-15 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (3520%). The associated results are non-detections. No qualification is necessary.

The sample RB01_14-15 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (7680%) and decachlorobiphenyl (242%). The sample was diluted >10X. No qualification is necessary.

The sample RB08_14-16 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1610%). The associated results are non-detections. No qualification is necessary.

The sample SODUP02_122718 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1270%). The associated results are non-detections. No qualification is necessary.

The sample RB01_9-11 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

L1853234

The MB for batch WG1193824 exhibited a detection of 4,4'-DDT (0.025 ug/l). The associated results are non-detections. No qualification is necessary.

L1900156

The sample RB09_19-21 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (204%). The associated results are non-detections. No qualification is necessary.

The sample RB11_19-21 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

The sample SODUP03_010219 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

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L1900324

The sample RB19_20-22 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1650%). The associated results are non-detections. No qualification is necessary.

The sample RB19_24-25 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (5140%). The associated results are non-detections. No qualification is necessary.

L1900536

The sample RB17_18-20 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (334%). The associated results are non-detections. No qualification is necessary.

The sample RB18_6-8 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (284%, 173%), and decachlorobiphenyl (218%). The associated results are non-detections. No qualification is necessary.

The sample RB20_0-2 exhibited a percent recovery below the LCL for the surrogate decachlorobiphenyl (27%). The other column surrogates were recovered within the control limits. No qualification is necessary.

L1900707

The sample RB13_22-24 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (642%). The associated results are non-detections. No qualification is necessary.

The sample RB14_23-25 exhibited a percent recovery above the UCL for the surrogate decachlorobiphenyl (155%). The associated results are non-detections. No qualification is necessary.

The sample RB14_23-25 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (152%) and decachlorobiphenyl (160%). The associated results are non-detections. No qualification is necessary.

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Metals by SW-846 Method 6010D

L1852610

The MB for batch WG1192853 exhibited a detection of iron, total (0.428 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The MS for batch WG1192853 exhibited a percent recovery above the UCL for calcium, total (1380%), and iron, total (686%), magnesium, total (127%), and manganese, total (190%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1852926

The MB for batch WG1193229 exhibited a detection of iron, total (0.672 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The field blank (FB) (SOFB01_122118) exhibited a detection of barium, total (0.002 mg/l) and copper, total (0.003 mg/l). The associated results are non-detections. No qualification is necessary.

The MS for batch WG1193229 exhibited a percent recovery below the LCL for aluminum, total (23%), iron, total (0%), and magnesium, total (72%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS for batch WG1193229 exhibited a percent recovery above the UCL for barium, total (320%), calcium, total (988%), lead, total (1700%), manganese, total (163%), and zinc, total (474%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1853110

The MB for batch WG1193639 exhibited a detection of sodium, total (1.49 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

L1853111

The MB for batch WG1193234 exhibited a detection of chromium, total (0.144 mg/kg), iron, total (1.26 mg/kg), manganese, total (0.088 mg/kg), and sodium, total (1.42 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The MS/MSD for batch WG1193639 exhibited a percent recovery above the UCL for aluminum, total (566%, 304%) and iron, total (1510%, 836%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

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The MS/MSD for batch WG1193639 exhibited a percent recovery below the LCL for manganese, total (56%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1853234

The MB for batch WG1193639 exhibited a detection of sodium, total (1.49 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The FB (SOFB02_122718) exhibited a detection of barium, total (0.002 mg/l), chromium, total (0.003 mg/l), copper, total (0.005 mg/l), acetone (1.6 ug/l), benzo(ghi)perylene (0.04 ug/l), dibenzo(a,h)anthracene (0.03 ug/l), and indeno(1,2,3-cd)pyrene (0.03 ug/l). The associated results are non-detections. No qualification is necessary.

L1900156

The MB for batch WG1194304 exhibited a detection of aluminum, total (1.4 mg/kg), iron, total (1.63 mg/kg), magnesium, total (1.31 mg/kg), and manganese, total (0.152 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

L1900324

The MS/MSD for batch WG1194873 exhibited a RPD above the control limit for iron, total (55%) and magnesium, total (31%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1194873 exhibited a percent recovery below the LCL for aluminum, total (0%), copper, total (63%), lead, total (22%), zinc, total (60%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1194873 exhibited a percent recovery above the UCL for calcium, total (2580%, 2410%) and manganese, total (200%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1900536

The MB for batch WG1195822 exhibited a detection of copper, total (0.268 mg/kg) and iron, total (0.488 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The MS for batch WG1195822 exhibited a percent recovery below the LCL for aluminum, total (18%), calcium, total (0%), iron, total (0%), lead, total (0%), magnesium, total (59%), and zinc,

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total (0%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS for batch WG1195822 exhibited a percent recovery above the UCL for copper, total (743%) and manganese, total (158%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1900707

The MB for batch WG1195823 exhibited a detection of sodium, total (1.64 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The MS/MSD for batch WG1196431 exhibited a RPD above the control limit for aluminum, total (39%) and iron, total (25%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1900879

The MB for batch WG1196160 exhibited a detection of iron, total (1.26 mg/kg), manganese, total (0.396 mg/kg), and nickel, total (0.32 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The FB (SOFB04_010819) exhibited a detection of barium, total (0.002 mg/l) and calcium, total (0.058 mg/l). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1196160 exhibited a percent recovery above the UCL for aluminum, total (214%, 190%) and iron, total (53%, 349%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1196160 exhibited a percent recovery above the UCL for aluminum, total (197%, 296%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1196160 exhibited a percent recovery below the LCL for iron, total (0%), manganese, total (0%), and thallium, total (73%, 73%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1196736 exhibited a percent recovery above the UCL for chloroethane (152%) and vinyl chloride (142%, 138%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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The MS/MSD for batch WG1196778-12 exhibited a RPD above the control limit for 1,1,1,2-tetrachloroethane (34%), 1,1,1-trichloroethane (31%), 1,1,2,2-tetrachloroethane (37%), 1,1-dichloropropene (33%), 1,2,3-trichlorobenzene (49%), 1,2,3-trichloropropane (38%), 1,2,4,5-tetramethylbenzene (48%), 1,2,4-trichlorobenzene (68%), 1,2,4-trimethylbenzene (51%), 1,2-dibromo-3-chloropropane (40%), 1,2-dibromoethane (38%), 1,2-dichlorobenzene (47%), 1,2-dichloroethane (37%), 1,2-dichloropropane (34%), 1,3,5-trimethylbenzene (50%), 1,3-dichlorobenzene (50%), 1,3-dichloropropane (35%), 1,4-dichlorobenzene (50%), 1,4-dioxane (64%), 2,2-dichloropropane (31%), 2-butanone (37%), 2-hexanone (40%), 4-methyl-2-pentanone (40%), acetone (47%), acrylonitrile (38%), benzene (33%), bromobenzene (41%), bromochloromethane (35%), bromodichloromethane (36%), bromoform (37%), carbon disulfide (31%), carbon tetrachloride (32%), chlorobenzene (39%), chloroethane (31%), chloroform (32%), dibromochloromethane (36%), dibromomethane (38%), ethyl ether (35%), ethylbenzene (42%), hexachlorobutadiene (62%), isopropylbenzene (34%), methyl tert butyl ether (36%), methylene chloride (32%), naphthalene (44%), styrene (43%), tetrachloroethene (38%), toluene (34%), trichloroethene (35%), vinyl acetate (38%), cis-1,2-dichloroethene (31%), cis-1,3-dichloropropene (37%), n-butylbenzene (62%), n-propylbenzene (40%), o-chlorotoluene (47%), o-xylene (42%), p-chlorotoluene (50%), 1,4-diethylbenzene (67%), 4-ethyltoluene (54%), p-isopropyltoluene (58%), p/m-xylene (44%), sec-butylbenzene (54%), tert-butylbenzene (50%), trans-1,2-dichloroethene (31%), trans-1,3-dichloropropene (35%), and trans-1,4-dichloro-2-butene (39%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

Cyanide by SW-846 Method 9012B

L1900879

The MS/MSD for batch WG1196064-5 exhibited a RPD above the control limit for cyanide, total (39%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

COMMENTS:

Field duplicate and parent sample pairs were collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 2X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 50% for soil. The following analytes did not meet the precision criteria:

- SODUP01_122118, parent RB04_8-10: lead, zinc, mercury
- SODUP02_122718, parent RB08_14-16 acetone, calcium, mercury

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- SODUP03_010219, parent RB09_19-21: 1,2,4,5-tetramethylbenzene, 1,4-diethylbenzene, 2-methylnaphthalene, barium, benzene, fluoranthene, isopropylbenzene, lead, naphthalene, n-butylbenzene, n-propylbenzene, phenanthrene, pyrene, sec-butylbenzene
- SODUP04_010719, parent RB14_23-25: 1,2,4,5-tetramethylbenzene, 1,3,5-trimethylbenzene, 1,4-diethylbenzene, 2-methylnaphthalene, ethylbenzene, isopropylbenzene, manganese, naphthalene, n-butylbenzene, n-propylbenzene, p-isopropyltoluene, sec-butylbenzene
- SODUP05_010819, parent RB15_23-25: 2-methylnaphthalene, benzene, naphthalene, n-propylbenzene

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 28, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Soil Samples Collected in September 2017
Langan Project No.: 170487001

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil samples collected in September 2017 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, metals, mercury (Hg), and percent solids (%S) by the methods specified below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Method 8270D and 8270C-SIM
- PCBs by SW-846 Method 8082A
- Pesticides by SW-846 Method 8081B
- Metals by SW-846 Method 6010C
- Mercury by SW-846 Method 7471B
- Percent Solids by Standard Method 2540G

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

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TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1731144	L1731144-01	SB09_0-2	9/5/2017	VOCs, SVOCs, Metals, Hg, %S
L1731144	L1731144-02	SOTB01_090517	9/5/2017	VOCs
L1731335	L1731335-01	SB04_6-7	9/5/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-02	SB08_23-24	9/5/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-03	SB08_0-2	9/5/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-04	SB07_0-2	9/5/2017	VOCs, SVOCs, PCBs, Pesticides, Metals, Hg, %S
L1731335	L1731335-05	FB01_090617	9/6/2017	VOCs, SVOCs, Metals, Hg
L1731335	L1731335-06	TB02_090617	9/6/2017	VOCs
L1731335	L1731335-07	SB06_23-23.5	9/6/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-08	SB06_11-12	9/6/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-09	SB05_6-7	9/6/2017	VOCs, SVOCs, PCBs, Pesticides, Metals, Hg, %S
L1731603	L1731603-01	FB02_090717	9/7/2017	VOCs, SVOCs, PCBs, Pesticides, Metals, Hg
L1731603	L1731603-02	SB01_11.5-12	9/7/2017	VOCs, SVOCs, Metals, Hg, %S
L1731603	L1731603-03	SB02_6-7	9/7/2017	VOCs, SVOCs, PCBs, Pesticides, Metals, Hg, %S
L1731603	L1731603-04	SB03_18-19	9/7/2017	VOCs, SVOCs, Metals, Hg, %S
L1731603	L1731603-05	SB04_6-7	9/7/2017	Metals, Hg, %S
L1731603	L1731603-07	TB03_090717	9/7/2017	VOCs
L1734010	L1734010-01	SB11_19.5-20	9/22/2017	VOCs, %S
L1734010	L1734010-02	SB12_18-19	9/22/2017	VOCs, %S
L1734010	L1734010-03	SB13_18-19	9/22/2017	VOCs, %S

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-36A, "Pesticide Data Validation"

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(October 2016, Revision 1), USEPA Region II SOP #HW-3a, "ICP-AES Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and Cyanide Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, sample extraction and digestion, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, serial dilutions, dual column performance, field duplicate, and field blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

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TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
FB01_090617	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
FB01_090617	SW8260C	123-91-1	1,4-DIOXANE	UJ
FB01_090617	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
FB01_090617	SW8270D	95-95-4	2,4,5-TRICHLOROPHENOL	UJ
FB01_090617	SW8260C	75-15-0	CARBON DISULFIDE	UJ
FB01_090617	SW8260C	74-87-3	CHLOROMETHANE	UJ
FB01_090617	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.001)
FB01_090617	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB01_090617	SW8260C	91-20-3	NAPHTHALENE	UJ
FB01_090617	SW8270D	59-50-7	P-CHLORO-M-CRESOL	UJ
FB01_090617	6020A	7440-23-5	SODIUM, TOTAL	U (0.245)
SB04_6-7	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB04_6-7	SW8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
SB04_6-7	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB04_6-7	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SB04_6-7	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SB04_6-7	SW8270D	99-09-2	3-NITROANILINE	UJ
SB04_6-7	SW8270D	100-01-6	4-NITROANILINE	UJ
SB04_6-7	SW8270D	65-85-0	BENZOIC ACID	UJ
SB04_6-7	SW8270D	84-74-2	DI-N-BUTYLPHTHALATE	UJ
SB04_6-7	SW8260C	60-29-7	ETHYL ETHER	UJ
SB04_6-7	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
SB04_6-7	SW8260C	75-01-4	VINYL CHLORIDE	UJ
SB05_6-7	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SB05_6-7	SW8270D	91-94-1	3,3'-DICHLOROBENZIDINE	UJ
SB05_6-7	SW8270D	65-85-0	BENZOIC ACID	UJ
SB05_6-7	SW8260C	75-00-3	CHLOROETHANE	UJ
SB05_6-7	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
SB05_6-7	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
SB05_6-7	SW8260C	91-20-3	NAPHTHALENE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
SB05_6-7	SW8260C	108-05-4	VINYL ACETATE	UJ
SB06_23-23.5	SW8260C	79-34-5	1,1,2,2-TETRACHLOROETHANE	UJ
SB06_23-23.5	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SB06_23-23.5	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SB06_23-23.5	SW8270D	99-09-2	3-NITROANILINE	UJ
SB06_23-23.5	SW8270D	100-01-6	4-NITROANILINE	UJ
SB06_23-23.5	SW8270D	100-02-7	4-NITROPHENOL	UJ
SB06_23-23.5	SW8270D	65-85-0	BENZOIC ACID	UJ
SB06_23-23.5	SW8270D	84-74-2	DI-N-BUTYLPHTHALATE	UJ
SB06_23-23.5	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
SB06_23-23.5	SW8260C	104-51-8	N-BUTYLBENZENE	J
SB06_23-23.5	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
SB06_23-23.5	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SB07_0-2	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB07_0-2	SW8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
SB07_0-2	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB07_0-2	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SB07_0-2	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SB07_0-2	SW8270D	99-09-2	3-NITROANILINE	UJ
SB07_0-2	SW8270D	100-01-6	4-NITROANILINE	UJ
SB07_0-2	SW8270D	65-85-0	BENZOIC ACID	UJ
SB07_0-2	SW8270D	84-74-2	DI-N-BUTYLPHTHALATE	UJ
SB07_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
SB07_0-2	SW8260C	60-29-7	ETHYL ETHER	UJ
SB07_0-2	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	J
SB07_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
SB08_23-24	SW8260C	79-34-5	1,1,2,2-TETRACHLOROETHANE	UJ
SB08_23-24	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SB08_23-24	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SB08_23-24	SW8270D	99-09-2	3-NITROANILINE	UJ
SB08_23-24	SW8270D	100-01-6	4-NITROANILINE	UJ
SB08_23-24	SW8270D	65-85-0	BENZOIC ACID	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
SB08_23-24	SW8270D	84-74-2	DI-N-BUTYLPHthalate	UJ
SB08_23-24	SW8260C	104-51-8	N-BUTYLBENZENE	J
SB08_23-24	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
TB02_090617	SW8260C	79-34-5	1,1,2,2-TETRACHLOROETHANE	UJ
TB02_090617	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
TB02_090617	SW8260C	95-63-6	1,2,4-TRIMETHYLBENZENE	UJ
TB02_090617	SW8260C	123-91-1	1,4-DIOXANE	R
TB02_090617	SW8260C	78-93-3	2-BUTANONE	R
TB02_090617	SW8260C	591-78-6	2-HEXANONE	R
TB02_090617	SW8260C	108-10-1	4-METHYL-2-PENTANONE	R
TB02_090617	SW8260C	67-64-1	ACETONE	R
TB02_090617	SW8260C	107-13-1	ACRYLONITRILE	R
TB02_090617	SW8260C	74-83-9	BROMOMETHANE	UJ
TB02_090617	SW8260C	75-15-0	CARBON DISULFIDE	UJ
TB02_090617	SW8260C	74-87-3	CHLOROMETHANE	UJ
TB02_090617	SW8260C	100-42-5	STYRENE	UJ
TB02_090617	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
TB02_090617	SW8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
TB02_090617	SW8260C	110-57-6	TRANS-1,4-DICHLORO-2-BUTENE	UJ
TB02_090617	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SB09_0-2	SW8270D	92-52-4	BIPHENYL	UJ
SOTB01_090517	SW8260C	123-91-1	1,4-DIOXANE	UJ
FB02_090717	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
FB02_090717	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
FB02_090717	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
FB02_090717	SW8260C	123-91-1	1,4-DIOXANE	UJ
FB02_090717	SW8260C	591-78-6	2-HEXANONE	UJ
FB02_090717	SW8270D	88-75-5	2-NITROPHENOL	UJ
FB02_090717	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
FB02_090717	SW8270D	117-81-7	BIS(2-ETHYLHEXYL)PHthalate	UJ
FB02_090717	SW8260C	74-83-9	BROMOMETHANE	UJ
FB02_090717	SW8260C	75-00-3	CHLOROETHANE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
FB02_090717	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.001)
FB02_090717	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB02_090717	SW8260C	91-20-3	NAPHTHALENE	UJ
FB02_090717	SW8260C	127-18-4	TETRACHLOROETHENE	UJ
FB02_090717	SW8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
FB02_090717	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
MW01_090717	SW8260C	630-20-6	1,1,1,2-TETRACHLOROETHANE	UJ
MW01_090717	SW8260C	71-55-6	1,1,1-TRICHLOROETHANE	UJ
MW01_090717	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
MW01_090717	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
MW01_090717	SW8270D	88-75-5	2-NITROPHENOL	UJ
MW01_090717	SW8260C	67-64-1	ACETONE	UJ
MW01_090717	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
MW01_090717	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
MW01_090717	SW8260C	75-27-4	BROMODICHLOROMETHANE	UJ
MW01_090717	SW8260C	75-25-2	BROMOFORM	UJ
MW01_090717	SW8260C	74-83-9	BROMOMETHANE	UJ
MW01_090717	SW8260C	56-23-5	CARBON TETRACHLORIDE	UJ
MW01_090717	6020A	7440-50-8	COPPER, DISSOLVED	J
MW01_090717	SW8260C	87-68-3	HEXACHLOROBUTADIENE	UJ
MW01_090717	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
MW01_090717	SW8260C	127-18-4	TETRACHLOROETHENE	J
MW01_090717	SW8260C	10061-02-6	TRANS-1,3-DICHLOROPROPENE	UJ
MW01_090717	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
MW01_090717 (LAB FILTER)	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
SB02_6-7	SW8081B	72-55-9	4,4'-DDE	J
SB02_6-7	SW8081B	57-74-9	CHLORDANE	J
SB02_6-7	SW8081B	76-44-8	HEPTACHLOR	J
SB02_6-7	SW8081B	5103-74-2	TRANS-CHLORDANE	J
SB03_18-19	SW8260C	67-64-1	ACETONE	J
TB03_090717	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
TB03_090717	SW8260C	123-91-1	1,4-DIOXANE	UJ
TB03_090717	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SB11_19.5-20	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB11_19.5-20	SW8260C	78-87-5	1,2-DICHLOROPROPANE	UJ
SB11_19.5-20	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB11_19.5-20	SW8260C	591-78-6	2-HEXANONE	UJ
SB11_19.5-20	SW8260C	74-97-5	BROMOCHLOROMETHANE	UJ
SB11_19.5-20	SW8260C	74-83-9	BROMOMETHANE	U (140)
SB11_19.5-20	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SB11_19.5-20	SW8260C	60-29-7	ETHYL ETHER	UJ
SB11_19.5-20	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
SB11_19.5-20	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SB12_18-19	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB12_18-19	SW8260C	78-87-5	1,2-DICHLOROPROPANE	UJ
SB12_18-19	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB12_18-19	SW8260C	591-78-6	2-HEXANONE	UJ
SB12_18-19	SW8260C	74-97-5	BROMOCHLOROMETHANE	UJ
SB12_18-19	SW8260C	74-83-9	BROMOMETHANE	U (170)
SB12_18-19	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SB12_18-19	SW8260C	60-29-7	ETHYL ETHER	UJ
SB12_18-19	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	J
SB12_18-19	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SB13_18-19	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB13_18-19	SW8260C	78-87-5	1,2-DICHLOROPROPANE	UJ
SB13_18-19	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB13_18-19	SW8260C	591-78-6	2-HEXANONE	UJ
SB13_18-19	SW8260C	74-97-5	BROMOCHLOROMETHANE	UJ
SB13_18-19	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SB13_18-19	SW8260C	60-29-7	ETHYL ETHER	UJ
SB13_18-19	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
SB13_18-19	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ

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MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. The section below describes the major deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731335:

The initial calibration for VOA122 exhibited response factors below the minimum response factor for 1,4-dioxane (0.000), 2-butanone (0.046), 2-hexanone (0.086), 4-methyl-2-pentanone (0.059), acetone (0.031), and acrylonitrile (0.044). The associated results in sample TB02_090617 are rejected.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731144:

The continuing calibration verification (CCV) analyzed on 9/9/2017 at 11:40 exhibited a percent difference (%D) above the control limit for 1,4-dioxane (-36.8%). The associated results in sample SOTB01_090517 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 7:34 exhibited %Ds above the control limit for vinyl chloride (-23.8%), ethyl ether (-21.7%), methyl tert butyl ether (-31.2%), 1,1-dichloroethane (-20.6%), ethyl tert-butyl ether (-67.8%), and 2,2-dichloropropane (-22.6%), and 1,1-dichloropropene (-21.2%). The associated results in sample SB09_0-2 are qualified as "UJ" based on potential indeterminate bias.

L1731335:

The laboratory control sample (LCS) for batch WG1040719 exhibited a percent recovery above the upper control limit (UCL) for methyl tert butyl ether (131%). The associated results in sample SB07_0-2 are qualified as "J" based on potential high bias.

The lab control sample and duplicate (LCS/LCSD) for batch WG1040944 exhibited a percent recovery below the lower control limit (LCL) for chloromethane (35%, 36%). The associated results in sample FB01_090617 are qualified as "UJ" based on potential low bias.

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The LCS/LCSD for batch WG1041054 exhibited a percent recovery below the LCL for styrene (65%, 65%). The associated results in sample TB02_090617 are qualified as "UJ" based on potential low bias.

The CCV analyzed on 9/12/2017 at 7:09 exhibited %Ds above the control limit for trichlorofluoromethane (-22%), and 1,1,2,2-tetrachloroethane (-22.1%), and n-butylbenzene (-21.9%). The associated results in samples SB08_23-24 and SB06_23-23.5 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 7:34 exhibited %Ds above the control limit for vinyl chloride (-23.8%), ethyl ether (-21.7%), methyl tert butyl ether (-31.2%), 1,1-dichloroethane (-20.6%), and 2,2-dichloropropane (-22.6%), and 1,1-dichloropropene (-21.2%). The associated results in samples SB04_6-7 and SB07_0-2 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 7:44 exhibited %Ds above the control limit for dichlorodifluoromethane (29.7%), chloromethane (64.7%), carbon disulfide (36.3%), 2,2-dichloropropane (-44.2%), 1,4-dioxane (-24.5%), and naphthalene (-22.1%), and 1,2,3-trichlorobenzene (-44.7%). The associated results in sample FB01_090617 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 18:39 exhibited %Ds above the control limit for chloromethane (28.9%), bromomethane (32.1%), trichlorofluoromethane (21.6%), 1,1-dichloroethene (25.5%), carbon disulfide (21.3%), trans-1,2-dichloroethene (20.7%), styrene (36.7%), 1,1,2,2-tetrachloroethane (-20.7%), trans-1,4-dichloro-2-butene (-20.5%), and tert-butylbenzene (-27.1%), and 1,2,4-trimethylbenzene (-28.8%). The associated results in sample TB02_090617 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 8:10 exhibited %Ds above the control limit for chloroethane (-32.5%), methyl tert-butyl ether (-85.5%), vinyl acetate (-22%), and 1,2-dibromo-3-chloropropane (25.2%), and naphthalene (23.1%). The associated results in sample SB05_6-7 are qualified as "UJ" based on potential indeterminate bias.

L1731603:

The LCS/LCSD for batch WG1041384 exhibited a relative percent difference (RPD) above the control limit for 1,4-dioxane (22%). The associated result in sample TB03_090717 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 9/12/2017 at 9:43 exhibited %Ds above the control limit for dichlorodifluoromethane (33.5%), bromomethane (20.4%), chloroethane (26.3%), trichlorofluoromethane (23.2%), 1,1-dichloroethene (23%), trans-1,2-dichloroethene (20.8%), 1,4-dioxane (-28.1%), tetrachloroethene (21.3%), 2-hexanone (-22%), 1,2,3-trichloropropane (-20.1%), naphthalene (-34%), and 1,2,3-trichlorobenzene (-25.5%). The associated results in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 7:18 exhibited a %D above the control limit for acetone (-22%). The associated result in sample SB03_18-19 are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 8:18 exhibited %Ds above the control limit for dichlorodifluoromethane (23.9%) and 1,1-dichloroethene (22.4%). The associated results in sample TB03_090717 are qualified as "UJ" based on potential indeterminate bias.

L1734010:

The method blank (MB) for batch WG1047112 exhibited a detection of bromomethane (80 ug/kg). The associated results in samples SB11_19.5-20 and SB12_18-19 are qualified as "U" at the reporting limit based on potential blank contamination.

The CCV analyzed on 9/28/2017 at 18:59 exhibited %Ds above the control limit for dichlorodifluoromethane (20.1%), trichlorofluoromethane (-22.7%), ethyl ether (-26.8%), methyl tert-butyl ether (-22.4%), 1,1-dichloroethene (-22.6%), 2,2-dichloropropane (-20.7%), bromochloromethane (-20.4%), and 1,2-dichloropropane (-20.4%), and 2-hexanone (24.3%). The associated results in samples SB11_19.5-20, SB12_18-19, and SB13_18-19 are qualified as "J" or "UJ" based on potential indeterminate bias.

SVOCs by SW-846 Method 8270D and 8270C-SIM:

L1731144:

The LCSD for batch WG1038824 exhibited a percent recovery below the LCL for biphenyl (53%). The associated results in sample SB09_0-2 are qualified as "UJ" based on potential low bias.

The CCV analyzed on 9/10/2017 at 11:48 exhibited a %D above the control limit for hexachlorocyclopentadiene (22.4%). The associated results in sample SB09_0-2 are qualified as "UJ" based on potential indeterminate bias.

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L1731335:

The LCS/LCSD for batch WG1039349 exhibited a percent recovery below the LCL for benzoic acid (0%). The associated results in samples SB04_6-7, SB08_23-24, SB07_0-2, SB06_23-23.5, and SB05_6-7 are qualified as "UJ" based on potential low bias.

The CCV analyzed on 9/11/2017 at 7:21 exhibited %Ds above the control limit for p-chloro-m-cresol (-22.2%) and 2,4,5-trichlorophenol (-23.6%). The associated results in sample FB01_090617 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/11/2017 at 7:22 exhibited %Ds above the control limit for 2,4-dimethylphenol (-20.1%), 3-nitroaniline (-22%), 2,4-dinitrotoluene (-20.7%), and 4-nitrophenol (-23.3%), and di-n-butylphthalate (-21.9%). The associated results in samples SB04_6-7, SB08_23-24, SB07_0-2, and SB06_23-23.5 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/11/2017 at 20:04 exhibited a %D above the control limit for hexachlorocyclopentadiene (20.9%). The associated results in sample SB05_6-7 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/11/2017 at 21:05 exhibited a %D above the control limit for 3,3'-dimethylbenzidine (-24.8%). The associated results in sample SB05_6-7 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 12:34 exhibited %Ds above the control limit for benzoic acid (-20.6%), hexachlorocyclopentadiene (27.4%), and 4-nitrophenol (-36.9%), and pentachlorophenol (34.5%). The associated results in sample SB06_23-23.5 are qualified as "UJ" based on potential indeterminate bias.

L1731603:

The CCV analyzed on 9/15/2017 at 7:39 exhibited a %D above the control limit for bis(2-ethylhexyl)phthalate (-20.7%). The associated result in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 9:23 exhibited a %D above the control limit for 2-nitrophenol (-23.4%). The associated result in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

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Pesticides by SW-846 Method 8081B:

L1731335:

The sample SB07_0-2 exhibited a dual column RPD above the control limit for endosulfan II. The associated result is qualified as "J" based on potential indeterminate bias.

L1731603:

The sample SB02_6-7 exhibited dual column RPDs above the control limit for 4,4'-DDE, chlordane, heptachlor, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

Metals by SW-846 Method 6010C:

L1731335:

The MB for batch WG1040374 exhibited a detection of chromium, total (0.00025 mg/l). The associated results in sample FB01_090617 are qualified as "U" at the reporting limit based on potential blank contamination.

The continuing calibration blank (R1001572-20) exhibited a detection of sodium (44.9 ug/l). The associated result in sample FB01_090617 is qualified as "U" at the sample concentration based on potential blank contamination.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731144:

The LCS for batch WG1040719 exhibited a percent recovery above the UCL for methyl tert butyl ether (131%). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1040719 exhibited detections of bromomethane (1.7 ug/kg) and methylene chloride (1.7 ug/kg). The associated results are non-detections. No qualification is necessary.

L1731335:

The MB for batch WG1040719 exhibited detections of bromomethane (1.7 ug/kg) and methylene chloride (1.7 ug/kg). The associated results are non-detections. No qualification is necessary.

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The LCS/LCSD for batch WG1040944 exhibited percent recoveries above the UCL for 1,2,3-trichlorobenzene (140%, 140%) and 2,2-dichloropropane (140%, 140%). The associated results are non-detections. No qualification is necessary.

The LCS/LCSD for batch WG1041231 exhibited a percent recovery above the UCL for methyl tert butyl ether (185%, 188%). The associated results are non-detections. No qualification is necessary.

L1731603:

The sample SB01_11.5-12 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The trip blank (TB) (TB03_090717) exhibited a detection of acetone (1.8 ug/l). The associated results are non-detections. No qualification is necessary.

L1734010:

The sample SB11_19.5-20 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (134%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample SB13_18-19 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (132%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

SVOCs by SW-846 Method 8270D and 8270C-SIM:

L1731144:

The sample SB09_0-2 exhibited a percent recovery below the LCL for the surrogate 2-fluorophenol (22%). The other two acid extractable surrogates were recovered within the control limits. No qualification is necessary.

L1731335:

The LCS/LCSD for batch WG1039521 exhibited a percent recovery above the UCL for p-chloro-m-cresol (100%, 113%). The associated results are non-detections. No qualification is necessary.

L1731603:

The LCS/LCSD for batch WG1039521 exhibited a percent recovery above the UCL for p-chloro-m-cresol (100%, 113%). The associated results are non-detections. No qualification is necessary.

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The LCS/LCSD for batch WG1039560 exhibited percent recoveries above the UCL for 4-nitrophenol (133%, 123%) and p-chloro-m-cresol (106%). The associated results are non-detections. No qualification is necessary.

Pesticides by SW-846 Method 8081B:

L1731335:

The LCS for batch WG1039570 exhibited a percent recovery above the UCL for delta-bhc (159%). The associated results are non-detections. No qualification is necessary.

The CCV analyzed on 9/11/2017 at 16:25 exhibited %Ds above the control limit on the secondary column for endrin aldehyde (21%) and methoxychlor (21.9%). The associated results in sample FB01_090617 are reported from the primary column. No qualification is necessary.

L1731603:

The LCSD for batch WG1041362 exhibited a percent recovery above the UCL for methoxychlor (154%). The associated results are non-detections. No qualification is necessary.

Metals by SW-846 Method 6010C:

L1731144:

The MB for batch WG1039090 exhibited a detection of copper, total (0.216 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

L1731335:

The MB for batch WG1039483 exhibited detections of manganese, total (1.59 mg/kg) and sodium, total (1.37 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The field blank (FB) (FB01_090617) exhibited detections of barium, total (0.00045 mg/l), calcium, total (0.0492 mg/l), and chromium, total (0.00056 mg/l), and sodium, total (0.245 mg/l). The associated results are non-detections. No qualification is necessary.

L1731603:

The MB for batch WG1039885 exhibited detections of calcium, total (1.54 mg/kg) and sodium, total (2.85 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The FB (FB02_090717) exhibited detections of aluminum, total (0.0283 mg/l), barium, total (0.00153 mg/l), calcium, total (0.457 mg/l), chromium, total (0.00098 mg/l), copper, total (0.0005

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mg/l), iron, total (0.0545 mg/l), lead, total (0.00131 mg/l), magnesium, total (0.0754 mg/l), manganese, total (0.00095 mg/l), nickel, total (0.00148 mg/l), potassium, total (0.102 mg/l), sodium, total (0.176 mg/l), and zinc, total (0.02017 mg/l). The associated results are non-detections. No qualification is necessary.

COMMENTS:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: January 23, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Soil Vapor Samples Collected in December 2018 and January 2019
Langan Project No.: 170487003

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil vapor samples collected in December 2018 and January 2019 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs) by the methods specified below.

- VOCs by USEPA Method TO-15

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

TABLE 1: SAMPLE SUMMARY

SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1900163	L1900163-01	RAA01	12/31/2018	VOCs
L1900163	L1900163-02	RSV01	12/31/2018	VOCs
L1900163	L1900163-03	RSV02	12/31/2018	VOCs
L1900163	L1900163-04	RSSV01	12/31/2018	VOCs
L1900163	L1900163-05	RSSV02	12/31/2018	VOCs
L1900163	L1900163-06	RSSV03	12/31/2018	VOCs
L1900163	L1900163-07	RSSV04	12/31/2018	VOCs
L1900163	L1900163-08	RSSV07	12/31/2018	VOCs
L1900997	L1900997-01	RSSV05	1/9/2019	VOCs
L1900997	L1900997-02	RSSV06	1/9/2019	VOCs

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Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017 and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, target compound identification and quantification, chromatograms, and overall system performance.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

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For Gerard & 146th Street
Soil Vapor Samples Collected in December 2018 and January 2019
Langan Project No.: 170487003
January 23, 2019 Page 3 of 4

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RAA01	TO-15	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
RSV01	TO-16	120-82-2	1,2,4-TRICHLOROBENZENE	UJ
RSV02	TO-17	120-82-3	1,2,4-TRICHLOROBENZENE	UJ
RSSV01	TO-18	120-82-4	1,2,4-TRICHLOROBENZENE	UJ
RSSV02	TO-19	120-82-5	1,2,4-TRICHLOROBENZENE	UJ
RSSV03	TO-20	120-82-6	1,2,4-TRICHLOROBENZENE	UJ
RSSV04	TO-21	120-82-7	1,2,4-TRICHLOROBENZENE	UJ
RSSV07	TO-22	120-82-8	1,2,4-TRICHLOROBENZENE	UJ
RSSV05	TO-23	120-82-9	1,2,4-TRICHLOROBENZENE	UJ
RSSV06	TO-24	120-82-10	1,2,4-TRICHLOROBENZENE	UJ

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by USEPA Method TO-15:

L1900997:

The initial calibration (ICAL) for instrument AIRLAB17 exhibited a relative standard deviation (RSD) above the control limit for 1,2,4-trichlorobenzene (31.1%). The associated results in sample RSSV05 and RSSV06 are qualified as "UJ" based on potential indeterminate bias.

L1900163:

The ICAL for instrument AIRLAB17 exhibited a RSD above the control limit for 1,2,4-trichlorobenzene (31.1%). The associated results in sample RAA01, RSV01, RSV02, RSSV01, RSSV02, RSSV03, RSSV04, and RSSV07 are qualified as "UJ" based on potential indeterminate bias.

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Data Usability Summary Report
For Gerard & 146th Street
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Langan Project No.: 170487003
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OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. No other deficiencies were identified.

COMMENTS:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 28, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Soil Vapor Samples Collected in September 2017
Langan Project No.: 170487003

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil vapor samples collected in September 2017 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs) by the methods specified below.

- VOCs by USEPA Method TO-15

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1731370	L1731370-01	SV06_090617	9/6/2017	VOCs
L1731370	L1731370-02	SV08_090617	9/6/2017	VOCs
L1731622	L1731622-01	RSV02	9/7/2017	VOCs
L1731622	L1731622-02	RSSV01	9/7/2017	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017 and the specifics of the methods employed.

Technical Memorandum

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, target compound identification and quantification, chromatograms, and overall system performance.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
No qualification necessary.				

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

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Data Usability Summary Report
For Gerard & 146th Street
Soil Vapor Samples Collected in September 2017
Langan Project No.: 170487003
February 28, 2019 Page 3 of 3

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. No minor deficiencies were identified.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. No other deficiencies were identified.

COMMENTS:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

APPENDIX G

LABORATORY DATA REPORTS



ANALYTICAL REPORT

Lab Number:	L1900163
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE & E. 146 STREET
Project Number:	170487001
Report Date:	01/09/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900163-01	RAA01	AIR	BRONX, NY	12/31/18 11:05	01/02/19
L1900163-02	RSV01	SOIL_VAPOR	BRONX, NY	12/31/18 11:29	01/02/19
L1900163-03	RSV02	SOIL_VAPOR	BRONX, NY	12/31/18 11:17	01/02/19
L1900163-04	RSSV01	SOIL_VAPOR	BRONX, NY	12/31/18 10:55	01/02/19
L1900163-05	RSSV02	SOIL_VAPOR	BRONX, NY	12/31/18 12:10	01/02/19
L1900163-06	RSSV03	SOIL_VAPOR	BRONX, NY	12/31/18 12:26	01/02/19
L1900163-07	RSSV04	SOIL_VAPOR	BRONX, NY	12/31/18 12:38	01/02/19
L1900163-08	RSSV07	SOIL_VAPOR	BRONX, NY	12/31/18 11:53	01/02/19

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 19, 2018. The canister certification results are provided as an addendum.

L1900163-01 through -04: results for Acetone should be considered estimated due to co-elution with a non-target peak.

L1900163-02: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L1900163-06 results for Acetone should be considered estimated due to co-elution with a non-target peak.

L1900163-07: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 01/09/19

AIR

Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-01

Date Collected: 12/31/18 11:05

Client ID: RAA01

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15

Analytical Date: 01/08/19 17:53

Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.698	0.200	--	3.45	0.989	--		1
Chloromethane	0.567	0.200	--	1.17	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.212	0.200	--	0.469	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	15.0	5.00	--	28.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.82	1.00	--	11.4	2.38	--		1
Trichlorofluoromethane	0.365	0.200	--	2.05	1.12	--		1
Isopropanol	1.80	0.500	--	4.42	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-01
 Client ID: RAA01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:05
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.454	0.200	--	1.60	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.642	0.200	--	2.05	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.223	0.200	--	1.04	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.11	0.200	--	4.18	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-01

Date Collected: 12/31/18 11:05

Client ID: RAA01

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.447	0.400	--	1.94	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	76		60-140
chlorobenzene-d5	94		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-02 D
 Client ID: RSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:29
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 20:25
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.510	0.500	--	2.52	2.47	--		2.5
Chloromethane	ND	0.500	--	ND	1.03	--		2.5
Freon-114	ND	0.500	--	ND	3.49	--		2.5
Vinyl chloride	ND	0.500	--	ND	1.28	--		2.5
1,3-Butadiene	ND	0.500	--	ND	1.11	--		2.5
Bromomethane	ND	0.500	--	ND	1.94	--		2.5
Chloroethane	ND	0.500	--	ND	1.32	--		2.5
Ethanol	ND	12.5	--	ND	23.6	--		2.5
Vinyl bromide	ND	0.500	--	ND	2.19	--		2.5
Acetone	ND	2.50	--	ND	5.94	--		2.5
Trichlorofluoromethane	ND	0.500	--	ND	2.81	--		2.5
Isopropanol	ND	1.25	--	ND	3.07	--		2.5
1,1-Dichloroethene	ND	0.500	--	ND	1.98	--		2.5
Tertiary butyl Alcohol	ND	1.25	--	ND	3.79	--		2.5
Methylene chloride	ND	1.25	--	ND	4.34	--		2.5
3-Chloropropene	ND	0.500	--	ND	1.57	--		2.5
Carbon disulfide	1.02	0.500	--	3.18	1.56	--		2.5
Freon-113	ND	0.500	--	ND	3.83	--		2.5
trans-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--		2.5
1,1-Dichloroethane	ND	0.500	--	ND	2.02	--		2.5
Methyl tert butyl ether	ND	0.500	--	ND	1.80	--		2.5
2-Butanone	2.12	1.25	--	6.25	3.69	--		2.5
cis-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--		2.5



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-02 D
 Client ID: RSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:29
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.25	--	ND	4.50	--		2.5
Chloroform	ND	0.500	--	ND	2.44	--		2.5
Tetrahydrofuran	ND	1.25	--	ND	3.69	--		2.5
1,2-Dichloroethane	ND	0.500	--	ND	2.02	--		2.5
n-Hexane	1.25	0.500	--	4.41	1.76	--		2.5
1,1,1-Trichloroethane	ND	0.500	--	ND	2.73	--		2.5
Benzene	1.09	0.500	--	3.48	1.60	--		2.5
Carbon tetrachloride	ND	0.500	--	ND	3.15	--		2.5
Cyclohexane	ND	0.500	--	ND	1.72	--		2.5
1,2-Dichloropropane	ND	0.500	--	ND	2.31	--		2.5
Bromodichloromethane	ND	0.500	--	ND	3.35	--		2.5
1,4-Dioxane	ND	0.500	--	ND	1.80	--		2.5
Trichloroethene	ND	0.500	--	ND	2.69	--		2.5
2,2,4-Trimethylpentane	ND	0.500	--	ND	2.34	--		2.5
Heptane	1.36	0.500	--	5.57	2.05	--		2.5
cis-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--		2.5
4-Methyl-2-pentanone	ND	1.25	--	ND	5.12	--		2.5
trans-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--		2.5
1,1,2-Trichloroethane	ND	0.500	--	ND	2.73	--		2.5
Toluene	107	0.500	--	403	1.88	--		2.5
2-Hexanone	1.81	0.500	--	7.42	2.05	--		2.5
Dibromochloromethane	ND	0.500	--	ND	4.26	--		2.5
1,2-Dibromoethane	ND	0.500	--	ND	3.84	--		2.5
Tetrachloroethene	4.36	0.500	--	29.6	3.39	--		2.5
Chlorobenzene	ND	0.500	--	ND	2.30	--		2.5
Ethylbenzene	4.22	0.500	--	18.3	2.17	--		2.5



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-02 D
 Client ID: RSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:29
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	16.5	1.00	--	71.7	4.34	--		2.5
Bromoform	ND	0.500	--	ND	5.17	--		2.5
Styrene	ND	0.500	--	ND	2.13	--		2.5
1,1,2,2-Tetrachloroethane	ND	0.500	--	ND	3.43	--		2.5
o-Xylene	5.84	0.500	--	25.4	2.17	--		2.5
4-Ethyltoluene	1.36	0.500	--	6.69	2.46	--		2.5
1,3,5-Trimethylbenzene	1.07	0.500	--	5.26	2.46	--		2.5
1,2,4-Trimethylbenzene	4.04	0.500	--	19.9	2.46	--		2.5
Benzyl chloride	ND	0.500	--	ND	2.59	--		2.5
1,3-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,4-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,2-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,2,4-Trichlorobenzene	ND	0.500	--	ND	3.71	--		2.5
Hexachlorobutadiene	ND	0.500	--	ND	5.33	--		2.5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	98		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-03
 Client ID: RSV02
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:17
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 21:03
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.507	0.200	--	2.51	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.57	1.00	--	13.2	2.38	--		1
Trichlorofluoromethane	0.230	0.200	--	1.29	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	2.12	0.200	--	6.60	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	22.1	0.500	--	65.2	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-03

Date Collected: 12/31/18 11:17

Client ID: RSV02

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.687	0.200	--	3.35	0.977	--		1
Tetrahydrofuran	0.907	0.500	--	2.68	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.94	0.200	--	6.84	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.923	0.200	--	2.95	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.358	0.200	--	1.23	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.428	0.200	--	2.00	0.934	--		1
Heptane	1.52	0.200	--	6.23	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	23.8	0.200	--	89.7	0.754	--		1
2-Hexanone	3.60	0.200	--	14.8	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	4.34	0.200	--	29.4	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	4.16	0.200	--	18.1	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-03

Date Collected: 12/31/18 11:17

Client ID: RSV02

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	16.5	0.400	--	71.7	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	5.78	0.200	--	25.1	0.869	--		1
4-Ethyltoluene	1.40	0.200	--	6.88	0.983	--		1
1,3,5-Trimethylbenzene	1.03	0.200	--	5.06	0.983	--		1
1,2,4-Trimethylbenzene	4.13	0.200	--	20.3	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	100		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-04
 Client ID: RSSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 10:55
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 21:42
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.547	0.200	--	2.70	0.989	--		1
Chloromethane	0.234	0.200	--	0.483	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.86	1.00	--	4.42	2.38	--		1
Trichlorofluoromethane	0.919	0.200	--	5.16	1.12	--		1
Isopropanol	0.658	0.500	--	1.62	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-04
 Client ID: RSSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 10:55
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.319	0.200	--	1.02	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.740	0.200	--	2.79	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	8.42	0.200	--	57.1	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.866	0.200	--	3.76	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-04

Date Collected: 12/31/18 10:55

Client ID: RSSV01

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	4.00	0.400	--	17.4	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.32	0.200	--	5.73	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.207	0.200	--	1.02	0.983	--		1
1,2,4-Trimethylbenzene	0.716	0.200	--	3.52	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	104		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-05
 Client ID: RSSV02
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:10
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 22:20
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.530	0.200	--	2.62	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.87	1.00	--	18.7	2.38	--		1
Trichlorofluoromethane	0.417	0.200	--	2.34	1.12	--		1
Isopropanol	0.949	0.500	--	2.33	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.16	0.500	--	3.42	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-05
 Client ID: RSSV02
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:10
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.502	0.200	--	1.77	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.479	0.200	--	1.65	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	3.91	0.200	--	16.0	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.31	0.200	--	4.94	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.51	0.200	--	6.56	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-05

Date Collected: 12/31/18 12:10

Client ID: RSSV02

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	4.97	0.400	--	21.6	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	2.42	0.200	--	10.5	0.869	--		1
4-Ethyltoluene	0.521	0.200	--	2.56	0.983	--		1
1,3,5-Trimethylbenzene	0.746	0.200	--	3.67	0.983	--		1
1,2,4-Trimethylbenzene	1.75	0.200	--	8.60	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	97		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-06
 Client ID: RSSV03
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:26
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 22:58
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.544	0.200	--	2.69	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.19	1.00	--	12.3	2.38	--		1
Trichlorofluoromethane	0.403	0.200	--	2.26	1.12	--		1
Isopropanol	0.533	0.500	--	1.31	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.787	0.500	--	2.73	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.427	0.200	--	1.33	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	4.97	0.500	--	14.7	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-06
 Client ID: RSSV03
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:26
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.631	0.200	--	3.08	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	0.604	0.200	--	2.44	0.809	--		1
n-Hexane	2.99	0.200	--	10.5	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	9.48	0.200	--	30.3	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.407	0.200	--	1.40	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.226	0.200	--	1.06	0.934	--		1
Heptane	2.24	0.200	--	9.18	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	17.2	0.200	--	64.8	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	8.28	0.200	--	56.1	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	2.13	0.200	--	9.25	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-06

Date Collected: 12/31/18 12:26

Client ID: RSSV03

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	10.4	0.400	--	45.2	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	3.72	0.200	--	16.2	0.869	--		1
4-Ethyltoluene	1.02	0.200	--	5.01	0.983	--		1
1,3,5-Trimethylbenzene	0.882	0.200	--	4.34	0.983	--		1
1,2,4-Trimethylbenzene	3.52	0.200	--	17.3	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	107		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-07 D
 Client ID: RSSV04
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:38
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/09/19 09:05
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
Freon-114	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	ND	1.00	--	ND	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethanol	ND	25.0	--	ND	47.1	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	36.3	5.00	--	86.2	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
Isopropanol	ND	2.50	--	ND	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Tertiary butyl Alcohol	ND	2.50	--	ND	7.58	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	1.76	1.00	--	5.48	3.11	--		5
Freon-113	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
2-Butanone	6.14	2.50	--	18.1	7.37	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-07 D

Date Collected: 12/31/18 12:38

Client ID: RSSV04

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5
Chloroform	2.14	1.00	--	10.5	4.88	--		5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	3.17	1.00	--	11.2	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	1.72	1.00	--	5.49	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	2.28	1.00	--	7.85	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	ND	1.00	--	ND	5.37	--		5
2,2,4-Trimethylpentane	ND	1.00	--	ND	4.67	--		5
Heptane	13.9	1.00	--	57.0	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	ND	2.50	--	ND	10.2	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	10.6	1.00	--	39.9	3.77	--		5
2-Hexanone	ND	1.00	--	ND	4.10	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	7.67	1.00	--	52.0	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	4.07	1.00	--	17.7	4.34	--		5



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-07 D
 Client ID: RSSV04
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:38
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	20.5	2.00	--	89.0	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	10.3	1.00	--	44.7	4.34	--		5
4-Ethyltoluene	1.38	1.00	--	6.78	4.92	--		5
1,3,5-Trimethylbenzene	4.00	1.00	--	19.7	4.92	--		5
1,2,4-Trimethylbenzene	4.12	1.00	--	20.3	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	76		60-140
chlorobenzene-d5	114		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-08
 Client ID: RSSV07
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:53
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/09/19 00:12
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.533	0.200	--	2.64	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.83	1.00	--	6.72	2.38	--		1
Trichlorofluoromethane	0.284	0.200	--	1.60	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-08

Date Collected: 12/31/18 11:53

Client ID: RSSV07

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.464	0.200	--	1.75	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.720	0.200	--	4.88	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	17.5	0.200	--	76.0	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-08
 Client ID: RSSV07
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:53
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	61.5	0.400	--	267	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	17.5	0.200	--	76.0	0.869	--		1
4-Ethyltoluene	0.226	0.200	--	1.11	0.983	--		1
1,3,5-Trimethylbenzene	0.290	0.200	--	1.43	0.983	--		1
1,2,4-Trimethylbenzene	0.900	0.200	--	4.42	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	115		60-140



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/08/19 15:26

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1195786-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/08/19 15:26

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1195786-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/08/19 15:26

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1195786-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
Chlorodifluoromethane	90		-		70-130	-		
Propylene	103		-		70-130	-		
Propane	77		-		70-130	-		
Dichlorodifluoromethane	112		-		70-130	-		
Chloromethane	94		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	110		-		70-130	-		
Methanol	78		-		70-130	-		
Vinyl chloride	107		-		70-130	-		
1,3-Butadiene	102		-		70-130	-		
Butane	97		-		70-130	-		
Bromomethane	110		-		70-130	-		
Chloroethane	114		-		70-130	-		
Ethyl Alcohol	74		-		70-130	-		
Dichlorofluoromethane	89		-		70-130	-		
Vinyl bromide	109		-		70-130	-		
Acrolein	87		-		70-130	-		
Acetone	110		-		70-130	-		
Acetonitrile	95		-		70-130	-		
Trichlorofluoromethane	122		-		70-130	-		
iso-Propyl Alcohol	100		-		70-130	-		
Acrylonitrile	88		-		70-130	-		
Pentane	95		-		70-130	-		
Ethyl ether	83		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
1,1-Dichloroethene	108		-		70-130	-		
tert-Butyl Alcohol	81		-		70-130	-		
Methylene chloride	96		-		70-130	-		
3-Chloropropene	100		-		70-130	-		
Carbon disulfide	98		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	114		-		70-130	-		
trans-1,2-Dichloroethene	104		-		70-130	-		
1,1-Dichloroethane	104		-		70-130	-		
Methyl tert butyl ether	88		-		70-130	-		
Vinyl acetate	104		-		70-130	-		
2-Butanone	99		-		70-130	-		
cis-1,2-Dichloroethene	105		-		70-130	-		
Ethyl Acetate	106		-		70-130	-		
Chloroform	112		-		70-130	-		
Tetrahydrofuran	91		-		70-130	-		
2,2-Dichloropropane	102		-		70-130	-		
1,2-Dichloroethane	116		-		70-130	-		
n-Hexane	91		-		70-130	-		
Isopropyl Ether	80		-		70-130	-		
Ethyl-Tert-Butyl-Ether	70		-		70-130	-		
1,2-Dichloroethene (total)	105		-			-		
1,2-Dichloroethene (total)	105		-			-		
1,1,1-Trichloroethane	107		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
1,1-Dichloropropene	90		-		70-130	-		
Benzene	89		-		70-130	-		
Carbon tetrachloride	117		-		70-130	-		
Cyclohexane	91		-		70-130	-		
Tertiary-Amyl Methyl Ether	66	Q	-		70-130	-		
Dibromomethane	95		-		70-130	-		
1,2-Dichloropropane	91		-		70-130	-		
Bromodichloromethane	105		-		70-130	-		
1,4-Dioxane	96		-		70-130	-		
Trichloroethene	97		-		70-130	-		
2,2,4-Trimethylpentane	93		-		70-130	-		
Methyl Methacrylate	93		-		70-130	-		
Heptane	89		-		70-130	-		
cis-1,3-Dichloropropene	91		-		70-130	-		
4-Methyl-2-pentanone	88		-		70-130	-		
trans-1,3-Dichloropropene	82		-		70-130	-		
1,1,2-Trichloroethane	98		-		70-130	-		
Toluene	97		-		70-130	-		
1,3-Dichloropropane	92		-		70-130	-		
2-Hexanone	88		-		70-130	-		
Dibromochloromethane	120		-		70-130	-		
1,2-Dibromoethane	100		-		70-130	-		
Butyl Acetate	81		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
Octane	92		-		70-130	-		
Tetrachloroethene	99		-		70-130	-		
1,1,1,2-Tetrachloroethane	102		-		70-130	-		
Chlorobenzene	99		-		70-130	-		
Ethylbenzene	99		-		70-130	-		
p/m-Xylene	102		-		70-130	-		
Bromoform	117		-		70-130	-		
Styrene	95		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		
o-Xylene	104		-		70-130	-		
1,2,3-Trichloropropane	94		-		70-130	-		
Nonane (C9)	84		-		70-130	-		
Isopropylbenzene	100		-		70-130	-		
Bromobenzene	93		-		70-130	-		
o-Chlorotoluene	97		-		70-130	-		
n-Propylbenzene	99		-		70-130	-		
p-Chlorotoluene	99		-		70-130	-		
4-Ethyltoluene	105		-		70-130	-		
1,3,5-Trimethylbenzene	88		-		70-130	-		
tert-Butylbenzene	103		-		70-130	-		
1,2,4-Trimethylbenzene	109		-		70-130	-		
Decane (C10)	100		-		70-130	-		
Benzyl chloride	129		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900163

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
1,3-Dichlorobenzene	108		-		70-130	-		
1,4-Dichlorobenzene	105		-		70-130	-		
sec-Butylbenzene	101		-		70-130	-		
p-Isopropyltoluene	99		-		70-130	-		
1,2-Dichlorobenzene	110		-		70-130	-		
n-Butylbenzene	114		-		70-130	-		
1,2-Dibromo-3-chloropropane	109		-		70-130	-		
Undecane	104		-		70-130	-		
Dodecane (C12)	102		-		70-130	-		
1,2,4-Trichlorobenzene	115		-		70-130	-		
Naphthalene	110		-		70-130	-		
1,2,3-Trichlorobenzene	106		-		70-130	-		
Hexachlorobutadiene	121		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900163

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1195786-5 QC Sample: L1900607-01 Client ID: DUP Sample						
Dichlorodifluoromethane	0.552	0.555	ppbV	1		25
Chloromethane	0.477	0.496	ppbV	4		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	2.78	2.74	ppbV	1		25
Trichlorofluoromethane	0.865	0.867	ppbV	0		25
iso-Propyl Alcohol	2.12	2.10	ppbV	1		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	0.865	0.865	ppbV	0		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900163

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1195786-5 QC Sample: L1900607-01 Client ID: DUP Sample						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
Xylene (Total)	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.804	0.784	ppbV	3		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900163

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1195786-5 QC Sample: L1900607-01 Client ID: DUP Sample						
Ethylbenzene	ND	ND	ppbV	NC		25
p/m-Xylene	ND	ND	ppbV	NC		25
1,2-Dichloroethene (total)	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
1,3-Dichloropropene, Total	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: GERARD AVE & E. 146 STREET

Serial_No:01091914:45
Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1900163-01	RAA01	0972	Flow 3	12/19/18	281620		-	-	-	Pass	18.0	17.8	1
L1900163-01	RAA01	2078	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.7	-3.7	-	-	-	-
L1900163-02	RSV01	0575	Flow 4	12/19/18	281620		-	-	-	Pass	18.0	18.0	0
L1900163-02	RSV01	2206	2.7L Can	12/19/18	281620	L1851680-01	Pass	-28.8	-4.0	-	-	-	-
L1900163-03	RSV02	0138	Flow 4	12/19/18	281620		-	-	-	Pass	18.0	18.3	2
L1900163-03	RSV02	2299	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.5	-3.0	-	-	-	-
L1900163-04	RSSV01	0934	Flow 3	12/19/18	281620		-	-	-	Pass	18.0	18.9	5
L1900163-04	RSSV01	2225	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.5	-2.3	-	-	-	-
L1900163-05	RSSV02	01143	SV20	12/28/18	282079		-	-	-	Pass	19.1	16.7	13
L1900163-05	RSSV02	2599	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.5	-4.7	-	-	-	-
L1900163-06	RSSV03	0387	Flow 3	12/19/18	281620		-	-	-	Pass	18.0	19.4	7
L1900163-06	RSSV03	174	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.6	-4.1	-	-	-	-
L1900163-07	RSSV04	0401	Flow 3	12/19/18	281620		-	-	-	Pass	18.0	17.7	2
L1900163-07	RSSV04	2347	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.4	-4.4	-	-	-	-
L1900163-08	RSSV07	0507	SV200	12/28/18	282079		-	-	-	Pass	19.0	16.5	14



Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Serial_No:01091914:45
Lab Number: L1900163

Report Date: 01/09/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1900163-08	RSSV07	2210	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.4	-4.4	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/14/18 21:42
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/14/18 21:42
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	91		60-140



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

N/A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900163-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-05A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-06A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-07A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-08A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: Data Usability Report



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 1

ALPHA ANALYTICAL
CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Langan Engineering
Address: 21 Penn Plaza, 360 W. 31st Street
8th Floor, NY, NY 10001-2727
Phone: (212) 479-5400
Fax: (212) 479-5444
Email: jleung@langan.com

Project Information

Project Name: Gerard Ave + E. 146th St.
Project Location: Bronx, NY
Project #: 170487001
Project Manager: Julia Leung
ALPHA Quote #: 7013

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due: _____ Time: _____

Date Rec'd in Lab: 1/31/19

Report Information - Data Deliverables

FAX
 ADEX
Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)
Other Formats: _____
 EMAIL (standard pdf report)
 Additional Deliverables: **ASP-B3**
Report to: (if different than Project Manager)

ALPHA Job #: L900163

Billing Information

Same as Client info PO #: _____

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:
Please also cc: datamanagement@langan.com and vzlvaga@langan.com

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
		Date	Start Time	End Time	Initial Vacuum	Final Vacuum													
00163, 01	RAA01	12/31/18	0900	1105	-30.63	-5.42	AA	JL	2.7L	2078	0972	X							
02	RSV01		0927	1129	-29.47	-5.69	SV	JL		2206	0575	X							
03	RSV02		0913	1117	-30.80	-4.84		JL		2299	0138	X							
04	RSSV01		0855	1055	-29.0	-4.30		JL		2225	0934	X							
05	RSSV02		1010	1210	-30.72	-6.65		JL		2599	0173	X							
06	RSSV03		1025	1226	-30.80	-5.99		JL		174	0387	X							
07	RSSV04		1034	1238	-29.9	-6.23		JL		2347	0401	X							
08	RSSV07		0951	1153	-30.33	-6.71		JL		2210	0507	X							

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By: *[Signature]* Date/Time: 1/2/19 - 3:15pm
Received By: *[Signature]* Date/Time: 1/2/19 1515
[Signature] 01103K8 0345
[Signature] 01103118 0200
[Signature] 1/3/19 0345



ANALYTICAL REPORT

Lab Number:	L1900997
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE & E. 146 STREET
Project Number:	170487001
Report Date:	01/15/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900997-01	RSSV05	SOIL_VAPOR	BRONX, NY	01/09/19 11:59	01/09/19
L1900997-02	RSSV06	SOIL_VAPOR	BRONX, NY	01/09/19 10:35	01/09/19

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 28, 2018. The canister certification results are provided as an addendum.

L1900997-02: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 01/15/19

AIR

Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-01

Date Collected: 01/09/19 11:59

Client ID: RSSV05

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 01/12/19 19:06

Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.545	0.200	--	2.69	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.06	1.00	--	7.27	2.38	--		1
Trichlorofluoromethane	0.285	0.200	--	1.60	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-01

Date Collected: 01/09/19 11:59

Client ID: RSSV05

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.237	0.200	--	0.757	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.42	0.200	--	9.12	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.319	0.200	--	2.16	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.573	0.200	--	2.49	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-01

Date Collected: 01/09/19 11:59

Client ID: RSSV05

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	2.14	0.400	--	9.30	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.563	0.200	--	2.45	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.893	0.200	--	4.39	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	95		60-140



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-02 D

Date Collected: 01/09/19 10:35

Client ID: RSSV06

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 01/13/19 02:32

Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
Freon-114	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	ND	1.00	--	ND	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethanol	ND	25.0	--	ND	47.1	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	8.18	5.00	--	19.4	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
Isopropanol	ND	2.50	--	ND	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Tertiary butyl Alcohol	ND	2.50	--	ND	7.58	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	ND	1.00	--	ND	3.11	--		5
Freon-113	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
2-Butanone	ND	2.50	--	ND	7.37	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-02 D

Date Collected: 01/09/19 10:35

Client ID: RSSV06

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5
Chloroform	ND	1.00	--	ND	4.88	--		5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	ND	1.00	--	ND	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	ND	1.00	--	ND	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	ND	1.00	--	ND	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	ND	1.00	--	ND	5.37	--		5
2,2,4-Trimethylpentane	ND	1.00	--	ND	4.67	--		5
Heptane	4.08	1.00	--	16.7	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	ND	2.50	--	ND	10.2	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	2.34	1.00	--	8.82	3.77	--		5
2-Hexanone	ND	1.00	--	ND	4.10	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	2.22	1.00	--	15.1	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	2.72	1.00	--	11.8	4.34	--		5



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-02 D

Date Collected: 01/09/19 10:35

Client ID: RSSV06

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	10.0	2.00	--	43.4	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	5.98	1.00	--	26.0	4.34	--		5
4-Ethyltoluene	ND	1.00	--	ND	4.92	--		5
1,3,5-Trimethylbenzene	1.60	1.00	--	7.87	4.92	--		5
1,2,4-Trimethylbenzene	1.50	1.00	--	7.37	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	102		60-140



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/12/19 15:20

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1197111-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/12/19 15:20

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1197111-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/12/19 15:20

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1197111-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
Chlorodifluoromethane	94		-		70-130	-		
Propylene	115		-		70-130	-		
Propane	84		-		70-130	-		
Dichlorodifluoromethane	116		-		70-130	-		
Chloromethane	93		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	109		-		70-130	-		
Methanol	80		-		70-130	-		
Vinyl chloride	105		-		70-130	-		
1,3-Butadiene	102		-		70-130	-		
Butane	94		-		70-130	-		
Bromomethane	108		-		70-130	-		
Chloroethane	101		-		70-130	-		
Ethyl Alcohol	81		-		70-130	-		
Dichlorofluoromethane	97		-		70-130	-		
Vinyl bromide	104		-		70-130	-		
Acrolein	85		-		70-130	-		
Acetone	107		-		70-130	-		
Acetonitrile	91		-		70-130	-		
Trichlorofluoromethane	121		-		70-130	-		
iso-Propyl Alcohol	94		-		70-130	-		
Acrylonitrile	85		-		70-130	-		
Pentane	95		-		70-130	-		
Ethyl ether	67	Q	-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
1,1-Dichloroethene	106		-		70-130	-		
tert-Butyl Alcohol	75		-		70-130	-		
Methylene chloride	94		-		70-130	-		
3-Chloropropene	99		-		70-130	-		
Carbon disulfide	96		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	114		-		70-130	-		
trans-1,2-Dichloroethene	102		-		70-130	-		
1,1-Dichloroethane	102		-		70-130	-		
Methyl tert butyl ether	83		-		70-130	-		
Vinyl acetate	102		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	114		-		70-130	-		
Ethyl Acetate	105		-		70-130	-		
Chloroform	112		-		70-130	-		
Tetrahydrofuran	90		-		70-130	-		
2,2-Dichloropropane	98		-		70-130	-		
1,2-Dichloroethane	115		-		70-130	-		
n-Hexane	90		-		70-130	-		
Isopropyl Ether	76		-		70-130	-		
Ethyl-Tert-Butyl-Ether	66	Q	-		70-130	-		
1,2-Dichloroethene (total)	108		-			-		
1,2-Dichloroethene (total)	108		-			-		
1,1,1-Trichloroethane	104		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
1,1-Dichloropropene	97		-		70-130	-		
Benzene	87		-		70-130	-		
Carbon tetrachloride	115		-		70-130	-		
Cyclohexane	90		-		70-130	-		
Tertiary-Amyl Methyl Ether	62	Q	-		70-130	-		
Dibromomethane	93		-		70-130	-		
1,2-Dichloropropane	88		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	94		-		70-130	-		
Trichloroethene	95		-		70-130	-		
2,2,4-Trimethylpentane	94		-		70-130	-		
Methyl Methacrylate	90		-		70-130	-		
Heptane	87		-		70-130	-		
cis-1,3-Dichloropropene	88		-		70-130	-		
4-Methyl-2-pentanone	86		-		70-130	-		
trans-1,3-Dichloropropene	80		-		70-130	-		
1,1,2-Trichloroethane	97		-		70-130	-		
Toluene	97		-		70-130	-		
1,3-Dichloropropane	89		-		70-130	-		
2-Hexanone	85		-		70-130	-		
Dibromochloromethane	119		-		70-130	-		
1,2-Dibromoethane	97		-		70-130	-		
Butyl Acetate	78		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Parameter	LCS	Qual	LCSD	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
Octane	90		-		70-130	-		
Tetrachloroethene	98		-		70-130	-		
1,1,1,2-Tetrachloroethane	102		-		70-130	-		
Chlorobenzene	98		-		70-130	-		
Ethylbenzene	98		-		70-130	-		
p/m-Xylene	102		-		70-130	-		
Bromoform	116		-		70-130	-		
Styrene	94		-		70-130	-		
1,1,2,2-Tetrachloroethane	103		-		70-130	-		
o-Xylene	104		-		70-130	-		
1,2,3-Trichloropropane	93		-		70-130	-		
Nonane (C9)	86		-		70-130	-		
Isopropylbenzene	100		-		70-130	-		
Bromobenzene	93		-		70-130	-		
o-Chlorotoluene	97		-		70-130	-		
n-Propylbenzene	99		-		70-130	-		
p-Chlorotoluene	99		-		70-130	-		
4-Ethyltoluene	104		-		70-130	-		
1,3,5-Trimethylbenzene	100		-		70-130	-		
tert-Butylbenzene	104		-		70-130	-		
1,2,4-Trimethylbenzene	109		-		70-130	-		
Decane (C10)	100		-		70-130	-		
Benzyl chloride	126		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900997

Report Date: 01/15/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
1,3-Dichlorobenzene	106		-		70-130	-		
1,4-Dichlorobenzene	106		-		70-130	-		
sec-Butylbenzene	102		-		70-130	-		
p-Isopropyltoluene	99		-		70-130	-		
1,2-Dichlorobenzene	107		-		70-130	-		
n-Butylbenzene	112		-		70-130	-		
1,2-Dibromo-3-chloropropane	106		-		70-130	-		
Undecane	103		-		70-130	-		
Dodecane (C12)	100		-		70-130	-		
1,2,4-Trichlorobenzene	114		-		70-130	-		
Naphthalene	105		-		70-130	-		
1,2,3-Trichlorobenzene	102		-		70-130	-		
Hexachlorobutadiene	117		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900997

Report Date: 01/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197111-5 QC Sample: L1900997-02 Client ID: RSSV06						
Dichlorodifluoromethane	ND	ND	ppbV	NC		25
Chloromethane	ND	ND	ppbV	NC		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	8.18	7.66	ppbV	7		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900997

Report Date: 01/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197111-5 QC Sample: L1900997-02 Client ID: RSSV06						
2-Butanone	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	4.08	3.84	ppbV	6		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900997

Report Date: 01/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197111-5 QC Sample: L1900997-02 Client ID: RSSV06						
Toluene	2.34	2.30	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	2.22	1.86	ppbV	18		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	2.72	2.54	ppbV	7		25
p/m-Xylene	10.0	9.74	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	5.98	5.74	ppbV	4		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	1.60	1.62	ppbV	1		25
1,2,4-Trimethylbenzene	1.50	1.54	ppbV	3		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Serial_No:01151916:50
Lab Number: L1900997

Report Date: 01/15/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1900997-01	RSSV05	0624	Flow 4	12/28/18	282079		-	-	-	Pass	18.0	8.7	70
L1900997-01	RSSV05	353	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.7	-10.37	-	-	-	-
L1900997-02	RSSV06	0854	Flow 4	12/28/18	282079		-	-	-	Pass	23.2	18.5	23
L1900997-02	RSSV06	207	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.4	-2.42	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/14/18 21:42
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/14/18 21:42
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	91		60-140



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

N/A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900997-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900997-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: Data Usability Report



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 1



CHAIN OF CUSTODY
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Project Information

Project Name: Gerard Ave + E. 146th St.

Project Location: Bronx, NY

Project #: 170487001

Project Manager: Julia Leung

ALPHA Quote #: 7013

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due: _____ Time: _____

Date Rec'd in Lab:

Report Information - Data Deliverables

FAX
 ADEX
Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)

Other Formats: _____

EMAIL (standard pdf report)

Additional Deliverables: ASP-B deliverables

Report to: (if different than Project Manager)

ALPHA Job #: L1900997

Billing Information

Same as Client info PO #: _____

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:
 Please also cc: datamanagement@langan.com and vzulvaga@langan.com

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS						Sample Comments (i.e. PID)	
		Date	Start Time								End Time	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES		TO-13A
900997-01	RSSV05	1/9/19	0916	1159	-29.95	-11.38	SV	JL	2.7L	353	0624	X						
-02	RSSV06	↓	0833	1035	-29.79	-3.55	SV	JL	2.7L	207	0854	X						

***SAMPLE MATRIX CODES** AA = Ambient Air (Indoor/Outdoor)
 SY = Soil Vapor/Landfill Gas/SVE
 Other = Please Specify

Relinquished By:	Date/Time:	Received By:	Date/Time:
<i>JL JL</i>	1/9/19 - 1215	<i>George Wagner</i>	1/9/19 1215
<i>George Wagner</i>	1/10/19 1000	<i>Brenden Joler</i>	1/10/19 900
<i>Brenden Joler</i>	1/10/19 1000	<i>BRA</i>	1/10/19 10:00

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



ANALYTICAL REPORT

Lab Number:	L1931018
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	404 EXTERIOR ST
Project Number:	170487001
Report Date:	07/25/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1931018-01	RSSV08_071519	SOIL_VAPOR	BRONX, NY	07/15/19 05:04	07/15/19
L1931018-02	RSSV09_071519	SOIL_VAPOR	BRONX, NY	07/15/19 05:01	07/15/19
L1931018-03	RAA02_071519	AIR	BRONX, NY	07/15/19 05:07	07/15/19

Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

Case Narrative (continued)

Report Revision

July 25, 2019: This report replaces the one previously issued on July 18, 2019. The report has been amended to change sample IDs for L1931018-01 and L1931018-02 at the request of the client.

Volatile Organics in Air

Canisters were released from the laboratory on July 15, 2019. The canister certification results are provided as an addendum.

L1931018-01 & -02 : The canister vacuum measured on receipt at the laboratory was > 15 in. Hg. Prior to sample analysis, the canisters were pressurized with UHP Nitrogen in order to facilitate the transfer of sample to the Gas Chromatograph. The addition of Nitrogen resulted in a dilution of the samples. The reporting limits have been elevated accordingly.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 07/25/19

AIR

Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-01 D
 Client ID: RSSV08_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:04
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 07/17/19 05:04
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.601	0.354	--	2.97	1.75	--		1.772
Chloromethane	ND	0.354	--	ND	0.731	--		1.772
Freon-114	ND	0.354	--	ND	2.47	--		1.772
Vinyl chloride	ND	0.354	--	ND	0.905	--		1.772
1,3-Butadiene	ND	0.354	--	ND	0.783	--		1.772
Bromomethane	ND	0.354	--	ND	1.37	--		1.772
Chloroethane	ND	0.354	--	ND	0.934	--		1.772
Ethanol	270	8.86	--	509	16.7	--		1.772
Vinyl bromide	ND	0.354	--	ND	1.55	--		1.772
Acetone	7.99	1.77	--	19.0	4.20	--		1.772
Trichlorofluoromethane	ND	0.354	--	ND	1.99	--		1.772
Isopropanol	1.20	0.886	--	2.95	2.18	--		1.772
1,1-Dichloroethene	ND	0.354	--	ND	1.40	--		1.772
Tertiary butyl Alcohol	3.06	0.886	--	9.28	2.69	--		1.772
Methylene chloride	ND	0.886	--	ND	3.08	--		1.772
3-Chloropropene	ND	0.354	--	ND	1.11	--		1.772
Carbon disulfide	2.38	0.354	--	7.41	1.10	--		1.772
Freon-113	ND	0.354	--	ND	2.71	--		1.772
trans-1,2-Dichloroethene	ND	0.354	--	ND	1.40	--		1.772
1,1-Dichloroethane	ND	0.354	--	ND	1.43	--		1.772
Methyl tert butyl ether	ND	0.354	--	ND	1.28	--		1.772
2-Butanone	8.07	0.886	--	23.8	2.61	--		1.772
cis-1,2-Dichloroethene	ND	0.354	--	ND	1.40	--		1.772



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-01 D
 Client ID: RSSV08_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:04
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.886	--	ND	3.19	--		1.772
Chloroform	0.633	0.354	--	3.09	1.73	--		1.772
Tetrahydrofuran	ND	0.886	--	ND	2.61	--		1.772
1,2-Dichloroethane	ND	0.354	--	ND	1.43	--		1.772
n-Hexane	4.16	0.354	--	14.7	1.25	--		1.772
1,1,1-Trichloroethane	ND	0.354	--	ND	1.93	--		1.772
Benzene	2.38	0.354	--	7.60	1.13	--		1.772
Carbon tetrachloride	4.32	0.354	--	27.2	2.23	--		1.772
Cyclohexane	2.51	0.354	--	8.64	1.22	--		1.772
1,2-Dichloropropane	ND	0.354	--	ND	1.64	--		1.772
Bromodichloromethane	ND	0.354	--	ND	2.37	--		1.772
1,4-Dioxane	ND	0.354	--	ND	1.28	--		1.772
Trichloroethene	ND	0.354	--	ND	1.90	--		1.772
2,2,4-Trimethylpentane	5.13	0.354	--	24.0	1.65	--		1.772
Heptane	4.53	0.354	--	18.6	1.45	--		1.772
cis-1,3-Dichloropropene	ND	0.354	--	ND	1.61	--		1.772
4-Methyl-2-pentanone	ND	0.886	--	ND	3.63	--		1.772
trans-1,3-Dichloropropene	ND	0.354	--	ND	1.61	--		1.772
1,1,2-Trichloroethane	ND	0.354	--	ND	1.93	--		1.772
Toluene	16.8	0.354	--	63.3	1.33	--		1.772
2-Hexanone	2.89	0.354	--	11.8	1.45	--		1.772
Dibromochloromethane	ND	0.354	--	ND	3.02	--		1.772
1,2-Dibromoethane	ND	0.354	--	ND	2.72	--		1.772
Tetrachloroethene	2.53	0.354	--	17.2	2.40	--		1.772
Chlorobenzene	ND	0.354	--	ND	1.63	--		1.772
Ethylbenzene	4.54	0.354	--	19.7	1.54	--		1.772



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-01 D
 Client ID: RSSV08_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:04
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	17.1	0.709	--	74.3	3.08	--		1.772
Bromoform	ND	0.354	--	ND	3.66	--		1.772
Styrene	ND	0.354	--	ND	1.51	--		1.772
1,1,2,2-Tetrachloroethane	ND	0.354	--	ND	2.43	--		1.772
o-Xylene	6.75	0.354	--	29.3	1.54	--		1.772
4-Ethyltoluene	1.32	0.354	--	6.49	1.74	--		1.772
1,3,5-Trimethylbenzene	2.20	0.354	--	10.8	1.74	--		1.772
1,2,4-Trimethylbenzene	7.75	0.354	--	38.1	1.74	--		1.772
Benzyl chloride	ND	0.354	--	ND	1.83	--		1.772
1,3-Dichlorobenzene	ND	0.354	--	ND	2.13	--		1.772
1,4-Dichlorobenzene	ND	0.354	--	ND	2.13	--		1.772
1,2-Dichlorobenzene	ND	0.354	--	ND	2.13	--		1.772
1,2,4-Trichlorobenzene	ND	0.354	--	ND	2.63	--		1.772
Hexachlorobutadiene	ND	0.354	--	ND	3.78	--		1.772

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	80		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	102		60-140



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-02 D
 Client ID: RSSV09_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:01
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 07/17/19 05:44
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.592	0.392	--	2.93	1.94	--		1.961
Chloromethane	0.463	0.392	--	0.956	0.809	--		1.961
Freon-114	ND	0.392	--	ND	2.74	--		1.961
Vinyl chloride	ND	0.392	--	ND	1.00	--		1.961
1,3-Butadiene	ND	0.392	--	ND	0.867	--		1.961
Bromomethane	ND	0.392	--	ND	1.52	--		1.961
Chloroethane	ND	0.392	--	ND	1.03	--		1.961
Ethanol	43.9	9.80	--	82.7	18.5	--		1.961
Vinyl bromide	ND	0.392	--	ND	1.71	--		1.961
Acetone	4.14	1.96	--	9.83	4.66	--		1.961
Trichlorofluoromethane	ND	0.392	--	ND	2.20	--		1.961
Isopropanol	ND	0.980	--	ND	2.41	--		1.961
1,1-Dichloroethene	ND	0.392	--	ND	1.55	--		1.961
Tertiary butyl Alcohol	3.84	0.980	--	11.6	2.97	--		1.961
Methylene chloride	1.27	0.980	--	4.41	3.40	--		1.961
3-Chloropropene	ND	0.392	--	ND	1.23	--		1.961
Carbon disulfide	2.29	0.392	--	7.13	1.22	--		1.961
Freon-113	ND	0.392	--	ND	3.00	--		1.961
trans-1,2-Dichloroethene	ND	0.392	--	ND	1.55	--		1.961
1,1-Dichloroethane	ND	0.392	--	ND	1.59	--		1.961
Methyl tert butyl ether	ND	0.392	--	ND	1.41	--		1.961
2-Butanone	6.20	0.980	--	18.3	2.89	--		1.961
cis-1,2-Dichloroethene	ND	0.392	--	ND	1.55	--		1.961



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-02 D
 Client ID: RSSV09_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:01
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.980	--	ND	3.53	--		1.961
Chloroform	ND	0.392	--	ND	1.91	--		1.961
Tetrahydrofuran	ND	0.980	--	ND	2.89	--		1.961
1,2-Dichloroethane	ND	0.392	--	ND	1.59	--		1.961
n-Hexane	14.5	0.392	--	51.1	1.38	--		1.961
1,1,1-Trichloroethane	ND	0.392	--	ND	2.14	--		1.961
Benzene	9.65	0.392	--	30.8	1.25	--		1.961
Carbon tetrachloride	0.482	0.392	--	3.03	2.47	--		1.961
Cyclohexane	13.0	0.392	--	44.7	1.35	--		1.961
1,2-Dichloropropane	ND	0.392	--	ND	1.81	--		1.961
Bromodichloromethane	ND	0.392	--	ND	2.63	--		1.961
1,4-Dioxane	ND	0.392	--	ND	1.41	--		1.961
Trichloroethene	ND	0.392	--	ND	2.11	--		1.961
2,2,4-Trimethylpentane	9.68	0.392	--	45.2	1.83	--		1.961
Heptane	14.6	0.392	--	59.8	1.61	--		1.961
cis-1,3-Dichloropropene	ND	0.392	--	ND	1.78	--		1.961
4-Methyl-2-pentanone	ND	0.980	--	ND	4.02	--		1.961
trans-1,3-Dichloropropene	ND	0.392	--	ND	1.78	--		1.961
1,1,2-Trichloroethane	ND	0.392	--	ND	2.14	--		1.961
Toluene	58.1	0.392	--	219	1.48	--		1.961
2-Hexanone	ND	0.392	--	ND	1.61	--		1.961
Dibromochloromethane	ND	0.392	--	ND	3.34	--		1.961
1,2-Dibromoethane	ND	0.392	--	ND	3.01	--		1.961
Tetrachloroethene	3.66	0.392	--	24.8	2.66	--		1.961
Chlorobenzene	ND	0.392	--	ND	1.81	--		1.961
Ethylbenzene	10.8	0.392	--	46.9	1.70	--		1.961



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-02 D
 Client ID: RSSV09_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:01
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	39.6	0.784	--	172	3.41	--		1.961
Bromoform	ND	0.392	--	ND	4.05	--		1.961
Styrene	ND	0.392	--	ND	1.67	--		1.961
1,1,2,2-Tetrachloroethane	ND	0.392	--	ND	2.69	--		1.961
o-Xylene	14.4	0.392	--	62.5	1.70	--		1.961
4-Ethyltoluene	2.55	0.392	--	12.5	1.93	--		1.961
1,3,5-Trimethylbenzene	3.58	0.392	--	17.6	1.93	--		1.961
1,2,4-Trimethylbenzene	12.8	0.392	--	62.9	1.93	--		1.961
Benzyl chloride	ND	0.392	--	ND	2.03	--		1.961
1,3-Dichlorobenzene	ND	0.392	--	ND	2.36	--		1.961
1,4-Dichlorobenzene	ND	0.392	--	ND	2.36	--		1.961
1,2-Dichlorobenzene	ND	0.392	--	ND	2.36	--		1.961
1,2,4-Trichlorobenzene	ND	0.392	--	ND	2.91	--		1.961
Hexachlorobutadiene	ND	0.392	--	ND	4.18	--		1.961

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	110		60-140



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-03
 Client ID: RAA02_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:07
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 07/16/19 19:44
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.478	0.200	--	2.36	0.989	--		1
Chloromethane	0.618	0.200	--	1.28	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	9.01	5.00	--	17.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.52	1.00	--	8.36	2.38	--		1
Trichlorofluoromethane	0.238	0.200	--	1.34	1.12	--		1
Isopropanol	0.814	0.500	--	2.00	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-03
 Client ID: RAA02_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:07
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.270	0.200	--	0.952	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.268	0.200	--	0.856	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.270	0.200	--	1.26	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.596	0.200	--	2.25	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name: 404 EXTERIOR ST**Lab Number:** L1931018**Project Number:** 170487001**Report Date:** 07/25/19**SAMPLE RESULTS**

Lab ID: L1931018-03
 Client ID: RAA02_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:07
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	92		60-140



Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/16/19 18:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1260608-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/16/19 18:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1260608-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1



Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/16/19 18:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1260608-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1260608-3								
Propylene	81		-		70-130	-		
Dichlorodifluoromethane	88		-		70-130	-		
Chloromethane	97		-		70-130	-		
Freon-114	91		-		70-130	-		
Vinyl chloride	94		-		70-130	-		
1,3-Butadiene	108		-		70-130	-		
Bromomethane	93		-		70-130	-		
Chloroethane	93		-		70-130	-		
Ethanol	110		-		40-160	-		
Vinyl bromide	89		-		70-130	-		
Acetone	77		-		40-160	-		
Trichlorofluoromethane	97		-		70-130	-		
Isopropanol	82		-		40-160	-		
1,1-Dichloroethene	105		-		70-130	-		
Tertiary butyl Alcohol	102		-		70-130	-		
Methylene chloride	118		-		70-130	-		
3-Chloropropene	100		-		70-130	-		
Carbon disulfide	103		-		70-130	-		
Freon-113	103		-		70-130	-		
trans-1,2-Dichloroethene	99		-		70-130	-		
1,1-Dichloroethane	99		-		70-130	-		
Methyl tert butyl ether	92		-		70-130	-		
Vinyl acetate	95		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1260608-3								
2-Butanone	87		-		70-130	-		
cis-1,2-Dichloroethene	91		-		70-130	-		
Ethyl Acetate	105		-		70-130	-		
Chloroform	90		-		70-130	-		
Tetrahydrofuran	77		-		70-130	-		
1,2-Dichloroethane	110		-		70-130	-		
n-Hexane	87		-		70-130	-		
1,1,1-Trichloroethane	105		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	113		-		70-130	-		
Cyclohexane	104		-		70-130	-		
1,2-Dichloropropane	105		-		70-130	-		
Bromodichloromethane	101		-		70-130	-		
1,4-Dioxane	97		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	107		-		70-130	-		
Heptane	110		-		70-130	-		
cis-1,3-Dichloropropene	103		-		70-130	-		
4-Methyl-2-pentanone	113		-		70-130	-		
trans-1,3-Dichloropropene	91		-		70-130	-		
1,1,2-Trichloroethane	103		-		70-130	-		
Toluene	94		-		70-130	-		
2-Hexanone	109		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1260608-3								
Dibromochloromethane	101		-		70-130	-		
1,2-Dibromoethane	94		-		70-130	-		
Tetrachloroethene	89		-		70-130	-		
Chlorobenzene	97		-		70-130	-		
Ethylbenzene	97		-		70-130	-		
p/m-Xylene	100		-		70-130	-		
Bromoform	114		-		70-130	-		
Styrene	92		-		70-130	-		
1,1,2,2-Tetrachloroethane	100		-		70-130	-		
o-Xylene	102		-		70-130	-		
4-Ethyltoluene	93		-		70-130	-		
1,3,5-Trimethylbenzene	96		-		70-130	-		
1,2,4-Trimethylbenzene	97		-		70-130	-		
Benzyl chloride	106		-		70-130	-		
1,3-Dichlorobenzene	98		-		70-130	-		
1,4-Dichlorobenzene	108		-		70-130	-		
1,2-Dichlorobenzene	91		-		70-130	-		
1,2,4-Trichlorobenzene	89		-		70-130	-		
Hexachlorobutadiene	87		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Project Number: 170487001

Lab Number: L1931018

Report Date: 07/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1260608-5 QC Sample: L1931018-02 Client ID: RSSV09_071519						
Dichlorodifluoromethane	0.592	0.590	ppbV	0		25
Chloromethane	0.463	0.488	ppbV	5		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	43.9	43.5	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	4.14	4.39	ppbV	6		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	3.84	3.93	ppbV	2		25
Methylene chloride	1.27	1.25	ppbV	2		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	2.29	2.27	ppbV	1		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Project Number: 170487001

Lab Number: L1931018

Report Date: 07/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1260608-5 QC Sample: L1931018-02 Client ID: RSSV09_071519						
2-Butanone	6.20	6.15	ppbV	1		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	14.5	13.7	ppbV	6		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	9.65	9.87	ppbV	2		25
Carbon tetrachloride	0.482	0.494	ppbV	2		25
Cyclohexane	13.0	12.9	ppbV	1		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	9.68	9.61	ppbV	1		25
Heptane	14.6	14.4	ppbV	1		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Project Number: 170487001

Lab Number: L1931018

Report Date: 07/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1260608-5 QC Sample: L1931018-02 Client ID: RSSV09_071519						
Toluene	58.1	59.5	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	3.66	3.95	ppbV	8		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	10.8	11.1	ppbV	3		25
p/m-Xylene	39.6	39.1	ppbV	1		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	14.4	14.5	ppbV	1		25
4-Ethyltoluene	2.55	2.74	ppbV	7		25
1,3,5-Trimethylbenzene	3.58	3.58	ppbV	0		25
1,2,4-Trimethylbenzene	12.8	13.5	ppbV	5		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: 404 EXTERIOR ST

Project Number: 170487001

Serial_No:07251911:13
Lab Number: L1931018

Report Date: 07/25/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1931018-01	RSSV08_071519	0396	Flow 5	07/15/19	296913		-	-	-	Pass	4.5	0.5	160
L1931018-01	RSSV08_071519	195	2.7L Can	07/15/19	296913	L1930221-05	Pass	-29.3	-17.7	-	-	-	-
L1931018-02	RSSV09_071519	0435	Flow 5	07/15/19	296913		-	-	-	Pass	4.5	4.6	2
L1931018-02	RSSV09_071519	411	2.7L Can	07/15/19	296913	L1930221-05	Pass	-29.2	-18.4	-	-	-	-
L1931018-03	RAA02_071519	01248	FLOW 5	07/15/19	296913		-	-	-	Pass	4.5	4.6	2
L1931018-03	RAA02_071519	202	2.7L Can	07/15/19	296913	L1930221-05	Pass	-29.2	-7.5	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 07/11/19 21:04
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	100		60-140
chlorobenzene-d5	100		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/11/19 21:04
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	99		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	100		60-140



Project Name: 404 EXTERIOR ST

Project Number: 170487001

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Absent

Container Information**Container ID** **Container Type**

Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
NA	NA			Y	Absent		TO15-LL(30)
NA	NA			Y	Absent		TO15-LL(30)

L1931018-01A Canister - 2.7 Liter

L1931018-02A Canister - 2.7 Liter

Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1.8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: Data Usability Report



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



AIR ANALYSIS

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
 TEL: 508-822-9300 FAX: 508-822-3288

PAGE 1 OF 1

Date Rec'd in Lab: 7-16-19

ALPHA Job #: L1931018

Client Information

Client: LANGAN ENG
 Address: 360 W 3RD STREET
 NEW YORK, NY
 Phone: 212 479 5400
 Fax:
 Email: jleung@langan.com

These samples have been previously analyzed by Alpha

Project Information

Project Name: 404 EXTERIOR ST
 Project Location: BRONX, NY
 Project #: 170487001
 Project Manager: JULIA LEUNG
 ALPHA Quote #:

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due: _____ Time: _____

Report Information - Data Deliverables

FAX
 ADEx
 Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)
 Other Formats:
 EMAIL (standard pdf report)
 Additional Deliverables:
 Report to: (if different than Project Manager)

Billing Information

Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:
 Project-Specific Target Compound List:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION				Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH <small>Subtract Non-halogenated HCs</small>	Fixed Gases <small>Sulfides & Mercaptans by TO-15</small>	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum										
31018-01	RSV03-071519	7/15/19	9:04	9:04	29.99	-17.88	SV	SS	2.7L	195	390	X			
02	RSV04-071519	↓	9:01	9:01	30.00	-18.51	↓	↓	↓	411	455	X			
03	RAA02-071519	↓	9:07	9:07	20.10	-7.03	↓	↓	↓	202	1248	X			
				5:07											
				5:01											
				5:07											

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
 SV = Soil Vapor/Landfill Gas/SVE
 Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By: Seth S. Eger Date/Time: 7/15/19 5:11 pm

Received By: Romek Jackson AAL Date/Time: 7/15/19 7:20

7/16/19 0070
 7/15/19 1958
 AAL 7-16-19 0230



ANALYTICAL REPORT

Lab Number:	L1901689
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/21/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1901689-01	RMW18_011419	WATER	BRONX, NY	01/14/19 14:27	01/14/19
L1901689-02	RMW22_011419	WATER	BRONX, NY	01/14/19 12:22	01/14/19
L1901689-03	GWFB01_011419	WATER	BRONX, NY	01/14/19 13:00	01/14/19
L1901689-04	GWTB01_011419	WATER	BRONX, NY	01/14/19 00:00	01/14/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Perfluorinated Alkyl Acids by Isotope Dilution

L1901689-03 and WG1198461QC: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1198573-11: The continuing calibration standard, associated with L1901689 as well as the associated QC, had the response for the extracted internal standard Perfluoro[1,2-¹³C₂]Tetradecanoic Acid (M2PFTEDA) (158.7%) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria, therefore no further action was taken.

Total Metals


The WG1197906-3 MS recoveries for calcium (30%) and iron (0%), performed on L1901689-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

Dissolved Metals

The WG1197826-3 MS recoveries for calcium (40%) and sodium (64%), performed on L1901689-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 01/21/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 10:37
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 11:05
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
Client ID: RMW22_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
Date Received: 01/14/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-04
 Client ID: GWTB01_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 00:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 11:33
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-04
 Client ID: GWTB01_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 00:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-04
 Client ID: GWTB01_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 00:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04 Batch: WG1198696-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/17/19 09:13
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04 Batch: WG1198696-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04 Batch: WG1198696-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1198696-3 WG1198696-4								
Methylene chloride	92		91		70-130	1		20
1,1-Dichloroethane	96		98		70-130	2		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	90		93		63-132	3		20
1,2-Dichloropropane	96		100		70-130	4		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	95		98		70-130	3		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	72		75		62-150	4		20
1,2-Dichloroethane	95		100		70-130	5		20
1,1,1-Trichloroethane	94		95		67-130	1		20
Bromodichloromethane	96		98		67-130	2		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	93		97		70-130	4		20
1,1-Dichloropropene	89		92		70-130	3		20
Bromoform	99		100		54-136	1		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	91		94		70-130	3		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	54	Q	55	Q	64-130	2		20
Bromomethane	43		29	Q	39-139	39	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1198696-3 WG1198696-4								
Vinyl chloride	75		75		55-140	0		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	78		80		61-145	3		20
trans-1,2-Dichloroethene	90		94		70-130	4		20
Trichloroethene	93		96		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	93		100		63-130	7		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	95		97		70-130	2		20
Dibromomethane	94		98		70-130	4		20
1,2,3-Trichloropropane	100		110		64-130	10		20
Acrylonitrile	92		100		70-130	8		20
Styrene	90		95		70-130	5		20
Dichlorodifluoromethane	56		57		36-147	2		20
Acetone	83		75		58-148	10		20
Carbon disulfide	81		82		51-130	1		20
2-Butanone	93		98		63-138	5		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	88		110		59-130	22	Q	20
2-Hexanone	80		96		57-130	18		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1198696-3 WG1198696-4								
Bromochloromethane	99		100		70-130	1		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	96		100		70-130	4		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	98		100		53-136	2		20
sec-Butylbenzene	99		100		70-130	1		20
tert-Butylbenzene	97		98		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	88		100		41-144	13		20
Hexachlorobutadiene	80		80		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	96		97		70-130	1		20
Naphthalene	84		93		70-130	10		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	86		91		70-130	6		20
1,2,4-Trichlorobenzene	88		89		70-130	1		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	100		100		56-162	0		20
p-Diethylbenzene	93		95		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1198696-3 WG1198696-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	88		89		70-130	1		20
Ethyl ether	86		91		59-134	6		20
trans-1,4-Dichloro-2-butene	96		100		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	99		97		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 14:59
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.8	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	65		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 19:03
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.03	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.10	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.08	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Acenaphthylene	0.09	J	ug/l	0.10	0.01	1
Anthracene	0.08	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	0.07	J	ug/l	0.10	0.01	1
Phenanthrene	0.26		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.16		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.08	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01

Date Collected: 01/14/19 14:27

Client ID: RMW18_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	66		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 15:54
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.9	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	63		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/16/19 16:43
 Analyst: PS

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	147	33.2	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			20		15-110	

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 19:26
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.11		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.09	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.22		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.08	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.19		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.27		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.11		ug/l	0.10	0.01	1
Chrysene	0.06	J	ug/l	0.10	0.01	1
Acenaphthylene	0.11		ug/l	0.10	0.01	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.33		ug/l	0.10	0.01	1
Fluorene	0.09	J	ug/l	0.10	0.01	1
Phenanthrene	0.13		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.09	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.31		ug/l	0.10	0.01	1
Pyrene	0.10	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02

Date Collected: 01/14/19 12:22

Client ID: RMW22_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	50		10-120
4-Terphenyl-d14	68		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
Client ID: RMW22_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
Date Received: 01/14/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 02:43
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.42		ng/l	1.80	0.336	1
Perfluoropentanoic Acid (PFPeA)	2.34		ng/l	1.80	0.417	1
Perfluorobutanesulfonic Acid (PFBS)	0.773	J	ng/l	1.80	0.342	1
Perfluorohexanoic Acid (PFHxA)	1.53	J	ng/l	1.80	0.442	1
Perfluoroheptanoic Acid (PFHpA)	0.982	J	ng/l	1.80	0.334	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.80	0.392	1
Perfluorooctanoic Acid (PFOA)	3.02		ng/l	1.80	0.414	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.914	J	ng/l	1.80	0.174	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.80	0.468	1
Perfluorononanoic Acid (PFNA)	0.680	J	ng/l	1.80	0.392	1
Perfluorooctanesulfonic Acid (PFOS)	5.47		ng/l	1.80	0.504	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.80	0.558	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.80	0.262	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.80	0.225	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.80	0.381	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.80	0.347	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.80	0.500	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.70	J	ng/l	1.80	0.335	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.80	0.532	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.80	0.282	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.80	0.888	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	69		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	83		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	59		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	74		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	162		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	84		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	103		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	103		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	10		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	92		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	76		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	116		33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-03
 Client ID: GWFB01_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 13:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/16/19 17:09
 Analyst: PS

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	147	33.2	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			27		15-110	

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-03
Client ID: GWFB01_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 13:00
Date Received: 01/14/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 00:31
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.77	0.330	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.77	0.410	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.77	0.336	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.77	0.435	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.77	0.329	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.77	0.385	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.77	0.406	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.05	J	ng/l	1.77	0.171	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.77	0.459	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.77	0.385	1
Perfluorooctanesulfonic Acid (PFOS)	0.972	J	ng/l	1.77	0.495	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.77	0.548	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.77	0.257	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.77	0.221	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.77	0.374	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.77	0.341	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.77	0.491	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.77	0.329	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.77	0.523	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.77	0.277	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.77	0.873	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-03
Client ID: GWFB01_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 13:00
Date Received: 01/14/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	112		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	127		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	108		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	96		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	104		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	115		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	112		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	102		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	124		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	120		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	106		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	86		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	107		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	125		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	35		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	87		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	107		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	155	Q	33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/15/19 09:45
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 18:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1197576-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/15/19 09:45
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 18:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1197576-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/15/19 09:45
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 18:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1197576-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	75		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/15/19 11:22
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1197577-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D-SIM
 Analytical Date: 01/15/19 11:22
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/14/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1197577-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	86		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D-SIM
Analytical Date: 01/16/19 14:05
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 01/15/19 18:30

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02-03 Batch: WG1197902-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	18		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 01/19/19 20:56
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 02-03 Batch: WG1198461-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.373
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.464
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.380
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.492
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.372
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.436
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.460
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.28	J	ng/l	2.00	0.194
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.520
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.436
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.560
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.620
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.291
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.250
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.424
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.386
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.556
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.373
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.592
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.314
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.988

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 01/19/19 20:56
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 02-03 Batch: WG1198461-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	115		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	123		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	124		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	100		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	110		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	111		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	117		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	108		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	113		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	136		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	118		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	112		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	134		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1197576-2 WG1197576-3								
Acenaphthene	60		72		37-111	18		30
1,2,4-Trichlorobenzene	65		85		39-98	27		30
Hexachlorobenzene	61		73		40-140	18		30
Bis(2-chloroethyl)ether	61		74		40-140	19		30
2-Chloronaphthalene	67		77		40-140	14		30
1,2-Dichlorobenzene	67		72		40-140	7		30
1,3-Dichlorobenzene	61		71		40-140	15		30
1,4-Dichlorobenzene	61		71		36-97	15		30
3,3'-Dichlorobenzidine	66		72		40-140	9		30
2,4-Dinitrotoluene	63		77		48-143	20		30
2,6-Dinitrotoluene	70		87		40-140	22		30
Fluoranthene	68		80		40-140	16		30
4-Chlorophenyl phenyl ether	65		76		40-140	16		30
4-Bromophenyl phenyl ether	64		77		40-140	18		30
Bis(2-chloroisopropyl)ether	70		76		40-140	8		30
Bis(2-chloroethoxy)methane	71		90		40-140	24		30
Hexachlorobutadiene	59		68		40-140	14		30
Hexachlorocyclopentadiene	49		67		40-140	31	Q	30
Hexachloroethane	65		74		40-140	13		30
Isophorone	74		87		40-140	16		30
Naphthalene	65		74		40-140	13		30
Nitrobenzene	68		80		40-140	16		30
NDPA/DPA	70		78		40-140	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1197576-2 WG1197576-3								
n-Nitrosodi-n-propylamine	76		88		29-132	15		30
Bis(2-ethylhexyl)phthalate	69		78		40-140	12		30
Butyl benzyl phthalate	72		89		40-140	21		30
Di-n-butylphthalate	66		76		40-140	14		30
Di-n-octylphthalate	77		85		40-140	10		30
Diethyl phthalate	69		79		40-140	14		30
Dimethyl phthalate	74		88		40-140	17		30
Benzo(a)anthracene	70		82		40-140	16		30
Benzo(a)pyrene	86		95		40-140	10		30
Benzo(b)fluoranthene	83		102		40-140	21		30
Benzo(k)fluoranthene	84		92		40-140	9		30
Chrysene	67		81		40-140	19		30
Acenaphthylene	69		82		45-123	17		30
Anthracene	67		80		40-140	18		30
Benzo(ghi)perylene	67		81		40-140	19		30
Fluorene	65		75		40-140	14		30
Phenanthrene	64		76		40-140	17		30
Dibenzo(a,h)anthracene	65		82		40-140	23		30
Indeno(1,2,3-cd)pyrene	63		73		40-140	15		30
Pyrene	59		78		26-127	28		30
Biphenyl	64		73		40-140	13		30
4-Chloroaniline	63		66		40-140	5		30
2-Nitroaniline	60		80		52-143	29		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1197576-2 WG1197576-3								
3-Nitroaniline	66		75		25-145	13		30
4-Nitroaniline	66		76		51-143	14		30
Dibenzofuran	62		72		40-140	15		30
2-Methylnaphthalene	64		78		40-140	20		30
1,2,4,5-Tetrachlorobenzene	52		72		2-134	32	Q	30
Acetophenone	73		81		39-129	10		30
2,4,6-Trichlorophenol	71		86		30-130	19		30
p-Chloro-m-cresol	70		89		23-97	24		30
2-Chlorophenol	67		78		27-123	15		30
2,4-Dichlorophenol	78		95		30-130	20		30
2,4-Dimethylphenol	74		96		30-130	26		30
2-Nitrophenol	72		88		30-130	20		30
4-Nitrophenol	86	Q	98	Q	10-80	13		30
2,4-Dinitrophenol	63		68		20-130	8		30
4,6-Dinitro-o-cresol	66		74		20-164	11		30
Pentachlorophenol	71		83		9-103	16		30
Phenol	44		54		12-110	20		30
2-Methylphenol	76		82		30-130	8		30
3-Methylphenol/4-Methylphenol	81		89		30-130	9		30
2,4,5-Trichlorophenol	74		87		30-130	16		30
Benzoic Acid	46		45		10-164	2		30
Benzyl Alcohol	74		86		26-116	15		30
Carbazole	73		88		55-144	19		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1197576-2 WG1197576-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	59		76		21-120
Phenol-d6	43		53		10-120
Nitrobenzene-d5	68		77		23-120
2-Fluorobiphenyl	63		75		15-120
2,4,6-Tribromophenol	73		81		10-120
4-Terphenyl-d14	56		66		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1197577-2 WG1197577-3								
Acenaphthene	74		78		40-140	5		40
2-Chloronaphthalene	76		82		40-140	8		40
Fluoranthene	92		95		40-140	3		40
Hexachlorobutadiene	69		76		40-140	10		40
Naphthalene	68		76		40-140	11		40
Benzo(a)anthracene	86		89		40-140	3		40
Benzo(a)pyrene	103		107		40-140	4		40
Benzo(b)fluoranthene	92		95		40-140	3		40
Benzo(k)fluoranthene	98		101		40-140	3		40
Chrysene	89		92		40-140	3		40
Acenaphthylene	83		89		40-140	7		40
Anthracene	83		87		40-140	5		40
Benzo(ghi)perylene	93		95		40-140	2		40
Fluorene	79		83		40-140	5		40
Phenanthrene	77		81		40-140	5		40
Dibenzo(a,h)anthracene	96		99		40-140	3		40
Indeno(1,2,3-cd)pyrene	103		106		40-140	3		40
Pyrene	89		91		40-140	2		40
2-Methylnaphthalene	73		80		40-140	9		40
Pentachlorophenol	71		73		40-140	3		40
Hexachlorobenzene	76		80		40-140	5		40
Hexachloroethane	69		75		40-140	8		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1197577-2 WG1197577-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	52		57		21-120
Phenol-d6	41		45		10-120
Nitrobenzene-d5	78		85		23-120
2-Fluorobiphenyl	75		81		15-120
2,4,6-Tribromophenol	94		102		10-120
4-Terphenyl-d14	83		84		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 02-03 Batch: WG1197902-2 WG1197902-3								
1,4-Dioxane	107		111		40-140	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	27		24		15-110



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 02-03 Batch: WG1198461-2 WG1198461-3								
Perfluorobutanoic Acid (PFBA)	84		93		67-148	10		30
Perfluoropentanoic Acid (PFPeA)	88		96		63-161	9		30
Perfluorobutanesulfonic Acid (PFBS)	82		90		65-157	9		30
Perfluorohexanoic Acid (PFHxA)	90		98		69-168	9		30
Perfluoroheptanoic Acid (PFHpA)	78		84		58-159	7		30
Perfluorohexanesulfonic Acid (PFHxS)	84		92		69-177	9		30
Perfluorooctanoic Acid (PFOA)	82		88		63-159	7		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	102		101		49-187	1		30
Perfluoroheptanesulfonic Acid (PFHpS)	77		95		61-179	21		30
Perfluorononanoic Acid (PFNA)	84		90		68-171	7		30
Perfluorooctanesulfonic Acid (PFOS)	68		76		52-151	11		30
Perfluorodecanoic Acid (PFDA)	86		96		63-171	11		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	90		100		56-173	11		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	78		82		60-166	5		30
Perfluoroundecanoic Acid (PFUnA)	76		82		60-153	8		30
Perfluorodecanesulfonic Acid (PFDS)	88		89		38-156	1		30
Perfluorooctanesulfonamide (FOSA)	79		90		46-170	13		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	80		84		45-170	5		30
Perfluorododecanoic Acid (PFDoA)	78		86		67-153	10		30
Perfluorotridecanoic Acid (PFTrDA)	95		115		48-158	19		30
Perfluorotetradecanoic Acid (PFTA)	94		98		59-182	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 02-03 Batch: WG1198461-2 WG1198461-3								

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		108		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		114		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	107		110		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		90		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		97		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	105		111		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		103		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		112		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	123		114		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	107		101		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	106		96		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	97		96		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	95		78		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	124		111		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	36		44		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	93		80		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	106		88		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	153	Q	154	Q	33-143

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
Client ID: RMW18_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
Date Received: 01/14/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/17/19 11:42
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/15/19 16:07
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/17/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
Client ID: RMW22_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
Date Received: 01/14/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/17/19 11:56
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/15/19 16:07
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/17/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/16/19 05:11
 Analyst: AWS

Extraction Method: EPA 3510C
 Extraction Date: 01/14/19 16:22
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/15/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/15/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG1197529-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	94		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1197529-2 WG1197529-3									
Aroclor 1016	88		85		40-140	4		50	A
Aroclor 1260	92		83		40-140	10		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		84		30-150	A
Decachlorobiphenyl	88		89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		87		30-150	B
Decachlorobiphenyl	115		95		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/17/19 12:01
 Analyst: SL

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01

Date Collected: 01/14/19 14:27

Client ID: RMW18_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	57		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 01:24
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/17/19 17:14

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	110		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/17/19 12:13
 Analyst: SL

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02

Date Collected: 01/14/19 12:22

Client ID: RMW22_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 01:43
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/17/19 17:14

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	100		30-150	A
DCAA	84		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/16/19 12:52
Analyst: SL

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1197534-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A
Heptachlor	ND		ug/l	0.014	0.002	B
Endrin ketone	ND		ug/l	0.029	0.003	B

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**Method Blank Analysis
Batch Quality Control**Analytical Method: 1,8081B
Analytical Date: 01/16/19 12:52
Analyst: SLExtraction Method: EPA 3510C
Extraction Date: 01/14/19 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1197534-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	36		30-150	A
Decachlorobiphenyl	41		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		30-150	B
Decachlorobiphenyl	43		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/19/19 00:27
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/17/19 17:14

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1198662-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	82		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1197534-2 WG1197534-3									
Delta-BHC	88		78		30-150	12		20	A
Lindane	84		75		30-150	11		20	A
Alpha-BHC	92		80		30-150	14		20	A
Beta-BHC	95		88		30-150	8		20	A
Heptachlor	88		78		30-150	13		20	A
Aldrin	87		77		30-150	12		20	A
Heptachlor epoxide	96		85		30-150	11		20	A
Endrin	94		82		30-150	13		20	A
Endrin aldehyde	84		73		30-150	14		20	A
Endrin ketone	98		86		30-150	14		20	A
Dieldrin	98		86		30-150	13		20	A
4,4'-DDE	92		81		30-150	13		20	A
4,4'-DDD	91		81		30-150	12		20	A
4,4'-DDT	92		80		30-150	15		20	A
Endosulfan I	89		80		30-150	11		20	A
Endosulfan II	91		79		30-150	14		20	A
Endosulfan sulfate	94		83		30-150	11		20	A
Methoxychlor	101		91		30-150	10		20	A
cis-Chlordane	80		73		30-150	10		20	A
trans-Chlordane	82		73		30-150	10		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1197534-2 WG1197534-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	85		74		30-150	A
Decachlorobiphenyl	85		48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		76		30-150	B
Decachlorobiphenyl	93		49		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1198662-2 WG1198662-3									
2,4-D	93		93		30-150	0		25	A
2,4,5-T	107		105		30-150	2		25	A
2,4,5-TP (Silvex)	90		91		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	103		102		30-150	A
DCAA	95		96		30-150	B



METALS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	21.7		mg/l	0.0100	0.00327	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Antimony, Total	0.00104	J	mg/l	0.00400	0.00042	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00684		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Barium, Total	0.3261		mg/l	0.00050	0.00017	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00126		mg/l	0.00050	0.00010	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00029		mg/l	0.00020	0.00005	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Calcium, Total	137.		mg/l	0.100	0.0394	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Chromium, Total	0.03672		mg/l	0.00100	0.00017	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Cobalt, Total	0.01846		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Copper, Total	0.04824		mg/l	0.00100	0.00038	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Iron, Total	36.4		mg/l	0.0750	0.0191	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Lead, Total	0.2268		mg/l	0.00100	0.00034	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Magnesium, Total	43.2		mg/l	0.0700	0.0242	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Manganese, Total	2.553		mg/l	0.00100	0.00044	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:18	01/16/19 20:32	EPA 7470A	1,7470A	MG
Nickel, Total	0.03340		mg/l	0.00200	0.00055	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Potassium, Total	15.0		mg/l	0.100	0.0309	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Selenium, Total	0.00469	J	mg/l	0.00500	0.00173	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Silver, Total	0.00039	J	mg/l	0.00040	0.00016	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Sodium, Total	67.6		mg/l	0.100	0.0293	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Thallium, Total	0.00035	J	mg/l	0.00050	0.00014	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Vanadium, Total	0.04135		mg/l	0.00500	0.00157	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Zinc, Total	0.1396		mg/l	0.01000	0.00341	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	0.036		mg/l	0.010	0.010	1		01/16/19 14:10	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00359	J	mg/l	0.0100	0.00327	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00130	J	mg/l	0.00400	0.00042	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00231		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1119		mg/l	0.00050	0.00017	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Calcium, Dissolved	130.		mg/l	0.100	0.0394	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00026	J	mg/l	0.00100	0.00017	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00274		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00078	J	mg/l	0.00100	0.00038	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Iron, Dissolved	5.45		mg/l	0.0750	0.0191	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00124		mg/l	0.00100	0.00034	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	36.9		mg/l	0.0700	0.0242	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.982		mg/l	0.00150	0.00044	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/16/19 14:45	01/16/19 21:11	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00184	J	mg/l	0.00200	0.00055	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Potassium, Dissolved	12.2		mg/l	0.100	0.0309	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Silver, Dissolved	0.00030	J	mg/l	0.00040	0.00016	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Sodium, Dissolved	73.5		mg/l	0.100	0.0293	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00439	J	mg/l	0.01000	0.00341	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2.22		mg/l	0.0100	0.00327	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Antimony, Total	0.00088	J	mg/l	0.00400	0.00042	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00532		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Barium, Total	0.1612		mg/l	0.00050	0.00017	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00015	J	mg/l	0.00050	0.00010	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Calcium, Total	55.3		mg/l	0.100	0.0394	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Chromium, Total	0.00468		mg/l	0.00100	0.00017	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00212		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Copper, Total	0.00900		mg/l	0.00100	0.00038	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Iron, Total	4.77		mg/l	0.0750	0.0191	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Lead, Total	0.2394		mg/l	0.00100	0.00034	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Magnesium, Total	13.2		mg/l	0.0700	0.0242	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Manganese, Total	1.111		mg/l	0.00100	0.00044	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Mercury, Total	0.00045		mg/l	0.00020	0.00006	1	01/16/19 12:18	01/16/19 20:33	EPA 7470A	1,7470A	MG
Nickel, Total	0.00627		mg/l	0.00200	0.00055	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Potassium, Total	7.15		mg/l	0.100	0.0309	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Silver, Total	0.00022	J	mg/l	0.00040	0.00016	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Sodium, Total	45.5		mg/l	0.100	0.0293	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00464	J	mg/l	0.00500	0.00157	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Zinc, Total	0.02428		mg/l	0.01000	0.00341	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/16/19 14:14	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00770	J	mg/l	0.0100	0.00327	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00066	J	mg/l	0.00400	0.00042	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00392		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.09109		mg/l	0.00050	0.00017	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Calcium, Dissolved	53.0		mg/l	0.100	0.0394	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00035	J	mg/l	0.00100	0.00017	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00071		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00209		mg/l	0.00100	0.00038	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Iron, Dissolved	1.75		mg/l	0.0750	0.0191	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00323		mg/l	0.00100	0.00034	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	12.4		mg/l	0.0700	0.0242	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.015		mg/l	0.00150	0.00044	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/16/19 14:45	01/16/19 21:16	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00119	J	mg/l	0.00200	0.00055	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Potassium, Dissolved	6.83		mg/l	0.100	0.0309	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Sodium, Dissolved	44.0		mg/l	0.100	0.0293	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1197826-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Antimony, Dissolved	0.00056	J	mg/l	0.00400	0.00042	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Iron, Dissolved	0.0443	J	mg/l	0.0750	0.0191	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Manganese, Dissolved	0.00122	J	mg/l	0.00150	0.00044	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1197906-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Antimony, Total	0.00063	J	mg/l	0.00400	0.00042	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis Batch Quality Control

Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Chromium, Total	0.00025	J	mg/l	0.00100	0.00017	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Iron, Total	0.0294	J	mg/l	0.0750	0.0191	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1198190-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:18	01/16/19 20:16	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1198242-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/16/19 14:45	01/16/19 21:02	1,7470A	MG



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197826-2								
Aluminum, Dissolved	108		-		80-120	-		
Antimony, Dissolved	94		-		80-120	-		
Arsenic, Dissolved	106		-		80-120	-		
Barium, Dissolved	108		-		80-120	-		
Beryllium, Dissolved	107		-		80-120	-		
Cadmium, Dissolved	114		-		80-120	-		
Calcium, Dissolved	102		-		80-120	-		
Chromium, Dissolved	98		-		80-120	-		
Cobalt, Dissolved	102		-		80-120	-		
Copper, Dissolved	96		-		80-120	-		
Iron, Dissolved	116		-		80-120	-		
Lead, Dissolved	117		-		80-120	-		
Magnesium, Dissolved	108		-		80-120	-		
Manganese, Dissolved	102		-		80-120	-		
Nickel, Dissolved	103		-		80-120	-		
Potassium, Dissolved	105		-		80-120	-		
Selenium, Dissolved	111		-		80-120	-		
Silver, Dissolved	108		-		80-120	-		
Sodium, Dissolved	104		-		80-120	-		
Thallium, Dissolved	112		-		80-120	-		
Vanadium, Dissolved	101		-		80-120	-		

Lab Control Sample Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197826-2					
Zinc, Dissolved	111	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197906-2					
Aluminum, Total	102	-	80-120	-	
Antimony, Total	92	-	80-120	-	
Arsenic, Total	98	-	80-120	-	
Barium, Total	98	-	80-120	-	
Beryllium, Total	105	-	80-120	-	
Cadmium, Total	108	-	80-120	-	
Calcium, Total	96	-	80-120	-	
Chromium, Total	92	-	80-120	-	
Cobalt, Total	96	-	80-120	-	
Copper, Total	95	-	80-120	-	
Iron, Total	104	-	80-120	-	
Lead, Total	106	-	80-120	-	
Magnesium, Total	103	-	80-120	-	
Manganese, Total	96	-	80-120	-	
Nickel, Total	96	-	80-120	-	
Potassium, Total	100	-	80-120	-	
Selenium, Total	109	-	80-120	-	
Silver, Total	103	-	80-120	-	
Sodium, Total	99	-	80-120	-	
Thallium, Total	103	-	80-120	-	
Vanadium, Total	96	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197906-2					
Zinc, Total	102	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1198190-2					
Mercury, Total	87	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1198242-2					
Mercury, Dissolved	101	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197826-3 QC Sample: L1901689-01 Client ID: RMW18_011419												
Aluminum, Dissolved	0.00359J	2	2.11	106		-	-		75-125	-		20
Antimony, Dissolved	0.00130J	0.5	0.5864	117		-	-		75-125	-		20
Arsenic, Dissolved	0.00231	0.12	0.1304	107		-	-		75-125	-		20
Barium, Dissolved	0.1119	2	2.159	102		-	-		75-125	-		20
Beryllium, Dissolved	ND	0.05	0.05368	107		-	-		75-125	-		20
Cadmium, Dissolved	ND	0.051	0.05450	107		-	-		75-125	-		20
Calcium, Dissolved	130.	10	134	40	Q	-	-		75-125	-		20
Chromium, Dissolved	0.00026J	0.2	0.1884	94		-	-		75-125	-		20
Cobalt, Dissolved	0.00274	0.5	0.4805	96		-	-		75-125	-		20
Copper, Dissolved	0.00078J	0.25	0.2300	92		-	-		75-125	-		20
Iron, Dissolved	5.45	1	6.40	95		-	-		75-125	-		20
Lead, Dissolved	0.00124	0.51	0.5530	108		-	-		75-125	-		20
Magnesium, Dissolved	36.9	10	46.1	92		-	-		75-125	-		20
Manganese, Dissolved	1.982	0.5	2.439	91		-	-		75-125	-		20
Nickel, Dissolved	0.00184J	0.5	0.4839	97		-	-		75-125	-		20
Potassium, Dissolved	12.2	10	21.8	96		-	-		75-125	-		20
Selenium, Dissolved	ND	0.12	0.129	108		-	-		75-125	-		20
Silver, Dissolved	0.00030J	0.05	0.05037	101		-	-		75-125	-		20
Sodium, Dissolved	73.5	10	79.9	64	Q	-	-		75-125	-		20
Thallium, Dissolved	ND	0.12	0.1243	104		-	-		75-125	-		20
Vanadium, Dissolved	ND	0.5	0.4823	96		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197826-3 QC Sample: L1901689-01 Client ID: RMW18_011419									
Zinc, Dissolved	0.00439J	0.5	0.5212	104	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197906-3 QC Sample: L1901689-01 Client ID: RMW18_011419									
Aluminum, Total	21.7	2	23.5	90	-	-	75-125	-	20
Antimony, Total	0.00104J	0.5	0.4475	90	-	-	75-125	-	20
Arsenic, Total	0.00684	0.12	0.1330	105	-	-	75-125	-	20
Barium, Total	0.3261	2	2.496	108	-	-	75-125	-	20
Beryllium, Total	0.00126	0.05	0.05060	99	-	-	75-125	-	20
Cadmium, Total	0.00029	0.051	0.06166	120	-	-	75-125	-	20
Calcium, Total	137.	10	140	30	Q	-	75-125	-	20
Chromium, Total	0.03672	0.2	0.2317	97	-	-	75-125	-	20
Cobalt, Total	0.01846	0.5	0.5180	100	-	-	75-125	-	20
Copper, Total	0.04824	0.25	0.2866	95	-	-	75-125	-	20
Iron, Total	36.4	1	34.4	0	Q	-	75-125	-	20
Lead, Total	0.2268	0.51	0.8128	115	-	-	75-125	-	20
Magnesium, Total	43.2	10	54.0	108	-	-	75-125	-	20
Manganese, Total	2.553	0.5	2.978	85	-	-	75-125	-	20
Nickel, Total	0.03340	0.5	0.5149	96	-	-	75-125	-	20
Potassium, Total	15.0	10	24.1	91	-	-	75-125	-	20
Selenium, Total	0.00469J	0.12	0.119	99	-	-	75-125	-	20
Silver, Total	0.00039J	0.05	0.05555	111	-	-	75-125	-	20
Sodium, Total	67.6	10	77.1	95	-	-	75-125	-	20
Thallium, Total	0.00035J	0.12	0.1332	111	-	-	75-125	-	20
Vanadium, Total	0.04135	0.5	0.5438	100	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197906-3 QC Sample: L1901689-01 Client ID: RMW18_011419									
Zinc, Total	0.1396	0.5	0.6858	109	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1198190-3 QC Sample: L1901495-01 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00432	86	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1198242-3 QC Sample: L1901689-01 Client ID: RMW18_011419									
Mercury, Dissolved	ND	0.005	0.00538	108	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197826-4 QC Sample: L1901689-01 Client ID: RMW18_011419						
Aluminum, Dissolved	0.00359J	0.00431J	mg/l	NC		20
Antimony, Dissolved	0.00130J	0.00289J	mg/l	NC		20
Arsenic, Dissolved	0.00231	0.00230	mg/l	1		20
Barium, Dissolved	0.1119	0.1068	mg/l	5		20
Beryllium, Dissolved	ND	ND	mg/l	NC		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Calcium, Dissolved	130.	127	mg/l	2		20
Chromium, Dissolved	0.00026J	0.00033J	mg/l	NC		20
Cobalt, Dissolved	0.00274	0.00261	mg/l	5		20
Copper, Dissolved	0.00078J	0.00081J	mg/l	NC		20
Iron, Dissolved	5.45	5.33	mg/l	2		20
Lead, Dissolved	0.00124	0.00122	mg/l	2		20
Magnesium, Dissolved	36.9	35.9	mg/l	3		20
Manganese, Dissolved	1.982	1.943	mg/l	2		20
Nickel, Dissolved	0.00184J	0.00172J	mg/l	NC		20
Potassium, Dissolved	12.2	11.7	mg/l	4		20
Selenium, Dissolved	ND	ND	mg/l	NC		20
Silver, Dissolved	0.00030J	0.00030J	mg/l	NC		20
Sodium, Dissolved	73.5	71.5	mg/l	3		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197826-4 QC Sample: L1901689-01 Client ID: RMW18_011419					
Thallium, Dissolved	ND	0.00030J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.00439J	0.00397J	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197906-4 QC Sample: L1901689-01 Client ID: RMW18_011419					
Aluminum, Total	21.7	18.9	mg/l	14	20
Antimony, Total	0.00104J	0.00291J	mg/l	NC	20
Arsenic, Total	0.00684	0.00647	mg/l	6	20
Barium, Total	0.3261	0.3094	mg/l	5	20
Beryllium, Total	0.00126	0.00141	mg/l	12	20
Cadmium, Total	0.00029	0.00024	mg/l	20	20
Calcium, Total	137.	136	mg/l	1	20
Chromium, Total	0.03672	0.03368	mg/l	9	20
Cobalt, Total	0.01846	0.01661	mg/l	11	20
Copper, Total	0.04824	0.04481	mg/l	7	20
Iron, Total	36.4	33.4	mg/l	9	20
Lead, Total	0.2268	0.2270	mg/l	0	20
Magnesium, Total	43.2	43.1	mg/l	0	20
Manganese, Total	2.553	2.516	mg/l	1	20
Nickel, Total	0.03340	0.03023	mg/l	10	20
Potassium, Total	15.0	13.9	mg/l	8	20
Selenium, Total	0.00469J	0.00446J	mg/l	NC	20
Silver, Total	0.00039J	0.00062	mg/l	NC	20
Sodium, Total	67.6	69.9	mg/l	3	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197906-4 QC Sample: L1901689-01 Client ID: RMW18_011419					
Thallium, Total	0.00035J	0.00055	mg/l	NC	20
Vanadium, Total	0.04135	0.03708	mg/l	11	20
Zinc, Total	0.1396	0.1233	mg/l	12	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1198190-4 QC Sample: L1901495-01 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1198242-4 QC Sample: L1901689-01 Client ID: RMW18_011419					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.003	J	mg/l	0.005	0.001	1	01/15/19 14:15	01/16/19 12:12	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/15/19 06:15	01/15/19 07:03	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02

Date Collected: 01/14/19 12:22

Client ID: RMW22_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.003	J	mg/l	0.005	0.001	1	01/15/19 14:15	01/16/19 12:53	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/15/19 06:15	01/15/19 07:03	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1197667-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/15/19 06:15	01/15/19 07:00	1,7196A	JT
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1197810-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/15/19 14:15	01/16/19 11:40	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1197667-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1197810-2 WG1197810-3								
Cyanide, Total	96		93		85-115	3		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1197667-4 QC Sample: L1901689-02 Client ID: RMW22_011419												
Chromium, Hexavalent	ND	0.1	0.095	95		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1197810-4 WG1197810-5 QC Sample: L1901689-01 Client ID: RMW18_011419												
Cyanide, Total	0.003J	0.2	0.189	94		0.191	96		80-120	1		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1197667-3 QC Sample: L1901689-02 Client ID: RMW22_011419						
Chromium, Hexavalent	ND	ND	mg/l	NC		20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01211917:18
Lab Number: L1901689
Report Date: 01/21/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901689-01A	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-01B	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-01C	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-01D	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901689-01E	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901689-01F	Plastic 250ml NaOH preserved	B	>12	>12	2.5	Y	Absent		TCN-9010(14)
L1901689-01G	Plastic 500ml unpreserved	B	7	7	2.5	Y	Absent		HEXCR-7196(1)
L1901689-01H	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-LVI(7)
L1901689-01I	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-LVI(7)
L1901689-01J	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1901689-01K	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1901689-01L	Amber 250ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901689-01M	Amber 250ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901689-01N	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		HERB-APA(7)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01211917:18
Lab Number: L1901689
Report Date: 01/21/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901689-01O	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		HERB-APA(7)
L1901689-02A	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-02B	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-02C	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-02D	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1901689-02E	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1901689-02F	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901689-02G	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901689-02H	Plastic 250ml NaOH preserved	B	>12	>12	2.5	Y	Absent		TCN-9010(14)
L1901689-02I	Plastic 500ml unpreserved	B	7	7	2.5	Y	Absent		HEXCR-7196(1)
L1901689-02J	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-LVI(7)
L1901689-02K	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-LVI(7)
L1901689-02L	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1901689-02M	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1901689-02N	Amber 250ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901689-02O	Amber 250ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901689-02P	Amber 500ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1901689-02Q	Amber 500ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1901689-02R	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		HERB-APA(7)
L1901689-02S	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		HERB-APA(7)

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Serial_No:01211917:18

Lab Number: L1901689

Report Date: 01/21/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901689-03A	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1901689-03B	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1901689-03C	Amber 500ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1901689-03D	Amber 500ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1901689-04A	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-04B	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



ANALYTICAL REPORT

Lab Number:	L1901865
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/22/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1901865-01	RMW03_011519	WATER	BRONX, NY	01/15/19 15:30	01/15/19
L1901865-02	RMW04_011519	WATER	BRONX, NY	01/15/19 13:00	01/15/19
L1901865-03	RMW05_011519	WATER	BRONX, NY	01/15/19 11:00	01/15/19
L1901865-04	GWDUP01_011519	WATER	BRONX, NY	01/15/19 00:00	01/15/19
L1901865-05	GWTB02_011519	WATER	BRONX, NY	01/15/19 00:00	01/15/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Pesticides

L1901865-01, -03 and -04: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1901865-03: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

The WG1198177-3/-4 MS/MSD recoveries for calcium (250%/310%), iron (151%/161%), magnesium (152%/168%) and sodium (290%/310%), performed on L1901865-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

Dissolved Metals

The WG1198261-3/-4 MS/MSD recoveries for calcium (320%/510%), iron (141%/185%), magnesium (161%/182%) and sodium (310%/370%), performed on L1901865-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1198261-4 MSD recovery, performed on L1901865-02, is outside the acceptance criteria for potassium (137%). A post digestion spike was performed and was within acceptance criteria.

The WG1198576-4 MSD recovery, performed on L1901865-02, is outside the acceptance criteria for mercury (56%). A post digestion spike was performed and was within acceptance criteria.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Case Narrative (continued)

The WG1198576-3/-4 MS/MSD RPD for mercury (39%), performed on L1901865-02, is above the acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Amita Naik

Title: Technical Director/Representative

Date: 01/22/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 15:16
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	92		ug/l	0.50	0.16	1
Toluene	2.0	J	ug/l	2.5	0.70	1
Ethylbenzene	2.2	J	ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	11		ug/l	2.5	0.70	1
o-Xylene	2.0	J	ug/l	2.5	0.70	1
Xylenes, Total	13	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	1.2	J	ug/l	2.5	0.70	1
sec-Butylbenzene	3.5		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	20		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	30		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
Client ID: RMW03_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	13		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	0.73	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	8.4		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	2.4		ug/l	2.0	0.70	1
p-Ethyltoluene	2.3		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	20		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 15:44
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.49	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	2.8		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
Client ID: RMW04_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	98		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 16:12
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
Client ID: RMW05_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 16:40
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	89		ug/l	0.50	0.16	1
Toluene	2.0	J	ug/l	2.5	0.70	1
Ethylbenzene	2.2	J	ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	11		ug/l	2.5	0.70	1
o-Xylene	2.0	J	ug/l	2.5	0.70	1
Xylenes, Total	13	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	1.3	J	ug/l	2.5	0.70	1
sec-Butylbenzene	3.5		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	21		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	28		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	13		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	0.77	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	8.6		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	2.5		ug/l	2.0	0.70	1
p-Ethyltoluene	2.3		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	20		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-05
 Client ID: GWTB02_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 17:07
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-05
 Client ID: GWTB02_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-05
 Client ID: GWTB02_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1198696-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/17/19 09:13
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1198696-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1198696-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1198696-3 WG1198696-4								
Methylene chloride	92		91		70-130	1		20
1,1-Dichloroethane	96		98		70-130	2		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	90		93		63-132	3		20
1,2-Dichloropropane	96		100		70-130	4		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	95		98		70-130	3		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	72		75		62-150	4		20
1,2-Dichloroethane	95		100		70-130	5		20
1,1,1-Trichloroethane	94		95		67-130	1		20
Bromodichloromethane	96		98		67-130	2		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	93		97		70-130	4		20
1,1-Dichloropropene	89		92		70-130	3		20
Bromoform	99		100		54-136	1		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	91		94		70-130	3		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	54	Q	55	Q	64-130	2		20
Bromomethane	43		29	Q	39-139	39	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1198696-3 WG1198696-4								
Vinyl chloride	75		75		55-140	0		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	78		80		61-145	3		20
trans-1,2-Dichloroethene	90		94		70-130	4		20
Trichloroethene	93		96		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	93		100		63-130	7		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	95		97		70-130	2		20
Dibromomethane	94		98		70-130	4		20
1,2,3-Trichloropropane	100		110		64-130	10		20
Acrylonitrile	92		100		70-130	8		20
Styrene	90		95		70-130	5		20
Dichlorodifluoromethane	56		57		36-147	2		20
Acetone	83		75		58-148	10		20
Carbon disulfide	81		82		51-130	1		20
2-Butanone	93		98		63-138	5		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	88		110		59-130	22	Q	20
2-Hexanone	80		96		57-130	18		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1198696-3 WG1198696-4								
Bromochloromethane	99		100		70-130	1		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	96		100		70-130	4		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	98		100		53-136	2		20
sec-Butylbenzene	99		100		70-130	1		20
tert-Butylbenzene	97		98		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	88		100		41-144	13		20
Hexachlorobutadiene	80		80		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	96		97		70-130	1		20
Naphthalene	84		93		70-130	10		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	86		91		70-130	6		20
1,2,4-Trichlorobenzene	88		89		70-130	1		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	100		100		56-162	0		20
p-Diethylbenzene	93		95		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1198696-3 WG1198696-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	88		89		70-130	1		20
Ethyl ether	86		91		59-134	6		20
trans-1,4-Dichloro-2-butene	96		100		70-130	4		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	99		97		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198696-6 WG1198696-7 QC Sample: L1901865-02 Client ID: RMW04_011519												
Methylene chloride	ND	10	9.1	91		9.1	91		70-130	0		20
1,1-Dichloroethane	ND	10	9.9	99		10	100		70-130	1		20
Chloroform	ND	10	10	100		10	100		70-130	0		20
Carbon tetrachloride	ND	10	10	100		10	100		63-132	0		20
1,2-Dichloropropane	ND	10	9.9	99		10	100		70-130	1		20
Dibromochloromethane	ND	10	10	100		10	100		63-130	0		20
1,1,2-Trichloroethane	ND	10	10	100		11	110		70-130	10		20
Tetrachloroethene	ND	10	10	100		10	100		70-130	0		20
Chlorobenzene	ND	10	10	100		10	100		75-130	0		20
Trichlorofluoromethane	ND	10	8.1	81		7.9	79		62-150	2		20
1,2-Dichloroethane	ND	10	9.8	98		9.9	99		70-130	1		20
1,1,1-Trichloroethane	ND	10	10	100		10	100		67-130	0		20
Bromodichloromethane	ND	10	9.7	97		9.8	98		67-130	1		20
trans-1,3-Dichloropropene	ND	10	9.4	94		9.6	96		70-130	2		20
cis-1,3-Dichloropropene	ND	10	9.0	90		8.9	89		70-130	1		20
1,1-Dichloropropene	ND	10	9.9	99		9.8	98		70-130	1		20
Bromoform	ND	10	9.4	94		9.6	96		54-136	2		20
1,1,2,2-Tetrachloroethane	ND	10	10	100		11	110		67-130	10		20
Benzene	0.49J	10	10	100		9.9	99		70-130	1		20
Toluene	ND	10	11	110		11	110		70-130	0		20
Ethylbenzene	ND	10	11	110		11	110		70-130	0		20
Chloromethane	ND	10	5.1	51	Q	4.8	48	Q	64-130	6		20
Bromomethane	ND	10	1.2J	12	Q	1.2J	12	Q	39-139	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198696-6 WG1198696-7 QC Sample: L1901865-02 Client ID: RMW04_011519												
Vinyl chloride	ND	10	8.2	82		7.6	76		55-140	8		20
Chloroethane	ND	10	10	100		9.7	97		55-138	3		20
1,1-Dichloroethene	ND	10	8.6	86		8.5	85		61-145	1		20
trans-1,2-Dichloroethene	ND	10	9.3	93		9.3	93		70-130	0		20
Trichloroethene	ND	10	10	100		9.7	97		70-130	3		20
1,2-Dichlorobenzene	ND	10	9.9	99		10	100		70-130	1		20
1,3-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
1,4-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
Methyl tert butyl ether	ND	10	9.5	95		9.8	98		63-130	3		20
p/m-Xylene	ND	20	22	110		22	110		70-130	0		20
o-Xylene	ND	20	21	105		22	110		70-130	5		20
cis-1,2-Dichloroethene	ND	10	9.9	99		9.7	97		70-130	2		20
Dibromomethane	ND	10	9.6	96		9.4	94		70-130	2		20
1,2,3-Trichloropropane	ND	10	11	110		11	110		64-130	0		20
Acrylonitrile	ND	10	10	100		10	100		70-130	0		20
Styrene	ND	20	19	95		19	95		70-130	0		20
Dichlorodifluoromethane	ND	10	5.7	57		5.6	56		36-147	2		20
Acetone	ND	10	9.0	90		9.9	99		58-148	10		20
Carbon disulfide	ND	10	8.4	84		8.2	82		51-130	2		20
2-Butanone	ND	10	9.0	90		9.3	93		63-138	3		20
Vinyl acetate	ND	10	11	110		10	100		70-130	10		20
4-Methyl-2-pentanone	ND	10	9.4	94		10	100		59-130	6		20
2-Hexanone	ND	10	8.4	84		9.4	94		57-130	11		20

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198696-6 WG1198696-7 QC Sample: L1901865-02 Client ID: RMW04_011519												
Bromochloromethane	ND	10	9.6	96		10	100		70-130	4		20
2,2-Dichloropropane	ND	10	8.1	81		7.9	79		63-133	2		20
1,2-Dibromoethane	ND	10	9.9	99		10	100		70-130	1		20
1,3-Dichloropropane	ND	10	10	100		11	110		70-130	10		20
1,1,1,2-Tetrachloroethane	ND	10	10	100		11	110		64-130	10		20
Bromobenzene	ND	10	9.8	98		10	100		70-130	2		20
n-Butylbenzene	ND	10	10	100		10	100		53-136	0		20
sec-Butylbenzene	ND	10	11	110		11	110		70-130	0		20
tert-Butylbenzene	ND	10	10	100		10	100		70-130	0		20
o-Chlorotoluene	ND	10	8.6	86		8.7	87		70-130	1		20
p-Chlorotoluene	ND	10	10	100		10	100		70-130	0		20
1,2-Dibromo-3-chloropropane	ND	10	9.2	92		9.5	95		41-144	3		20
Hexachlorobutadiene	ND	10	8.8	88		8.1	81		63-130	8		20
Isopropylbenzene	ND	10	11	110		11	110		70-130	0		20
p-Isopropyltoluene	ND	10	10	100		10	100		70-130	0		20
Naphthalene	2.8	10	12	92		13	102		70-130	8		20
n-Propylbenzene	ND	10	11	110		11	110		69-130	0		20
1,2,3-Trichlorobenzene	ND	10	8.8	88		9.2	92		70-130	4		20
1,2,4-Trichlorobenzene	ND	10	9.0	90		8.9	89		70-130	1		20
1,3,5-Trimethylbenzene	ND	10	10	100		10	100		64-130	0		20
1,2,4-Trimethylbenzene	ND	10	11	110		11	110		70-130	0		20
1,4-Dioxane	ND	500	500	100		590	118		56-162	17		20
p-Diethylbenzene	ND	10	10	100		9.8	98		70-130	2		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198696-6 WG1198696-7 QC Sample: L1901865-02 Client ID: RMW04_011519												
p-Ethyltoluene	ND	10	11	110		11	110		70-130	0		20
1,2,4,5-Tetramethylbenzene	ND	10	9.5	95		9.5	95		70-130	0		20
Ethyl ether	ND	10	8.8	88		8.8	88		59-134	0		20
trans-1,4-Dichloro-2-butene	ND	10	6.6	66	Q	5.8	58	Q	70-130	13		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	99		98		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	99		96		70-130
Toluene-d8	103		102		70-130



SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 16:48
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.0	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	0.85	J	ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	107		10-120
4-Terphenyl-d14	79		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 13:29
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	33		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	2.8		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	18		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.22		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.20		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.16		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Chrysene	0.19		ug/l	0.10	0.01	1
Acenaphthylene	1.4		ug/l	0.10	0.01	1
Anthracene	0.61		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.14		ug/l	0.10	0.01	1
Fluorene	0.90		ug/l	0.10	0.01	1
Phenanthrene	0.53		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.08	J	ug/l	0.10	0.01	1
Pyrene	2.7		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.31	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-01

Date Collected: 01/15/19 15:30

Client ID: RMW03_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	77		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 17:16
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.1	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	76		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 17:05
 Analyst: JJW

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	3.3		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.57		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	3.3		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.18		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.18		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.21		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.07	J	ug/l	0.10	0.01	1
Chrysene	0.15		ug/l	0.10	0.01	1
Acenaphthylene	0.23		ug/l	0.10	0.01	1
Anthracene	0.21		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.15		ug/l	0.10	0.01	1
Fluorene	0.46		ug/l	0.10	0.01	1
Phenanthrene	0.84		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.04	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.11		ug/l	0.10	0.01	1
Pyrene	0.87		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.30		ug/l	0.10	0.02	1
Pentachlorophenol	9.2		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	78		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 17:43
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
Client ID: RMW05_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	77		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 13:53
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	4.8		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.85		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.40		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.25		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.26		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.28		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.09	J	ug/l	0.10	0.01	1
Chrysene	0.20		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.27		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.17		ug/l	0.10	0.01	1
Fluorene	0.39		ug/l	0.10	0.01	1
Phenanthrene	0.94		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.04	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.15		ug/l	0.10	0.01	1
Pyrene	0.96		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.15		ug/l	0.10	0.02	1
Pentachlorophenol	0.22	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-03

Date Collected: 01/15/19 11:00

Client ID: RMW05_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	75		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 18:10
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	57		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	103		10-120
4-Terphenyl-d14	85		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 17:29
 Analyst: JJW

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	32		ug/l	0.10	0.01	1
2-Chloronaphthalene	0.04	J	ug/l	0.20	0.02	1
Fluoranthene	2.5		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	19		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.14		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.09	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.08	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.12		ug/l	0.10	0.01	1
Acenaphthylene	1.3		ug/l	0.10	0.01	1
Anthracene	0.59		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.07	J	ug/l	0.10	0.01	1
Fluorene	0.83		ug/l	0.10	0.01	1
Phenanthrene	0.50		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.05	J	ug/l	0.10	0.01	1
Pyrene	2.3		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.26		ug/l	0.10	0.02	1
Pentachlorophenol	0.21	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	75		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/18/19 12:47
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198362-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/18/19 12:47
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198362-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/18/19 12:47
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198362-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	41		10-120
4-Terphenyl-d14	82		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/18/19 14:44
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1198363-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	0.18	J	ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/18/19 14:44
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1198363-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	86		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198362-2 WG1198362-3								
Acenaphthene	83		77		37-111	8		30
1,2,4-Trichlorobenzene	78		75		39-98	4		30
Hexachlorobenzene	84		76		40-140	10		30
Bis(2-chloroethyl)ether	78		77		40-140	1		30
2-Chloronaphthalene	81		78		40-140	4		30
1,2-Dichlorobenzene	74		72		40-140	3		30
1,3-Dichlorobenzene	72		70		40-140	3		30
1,4-Dichlorobenzene	73		71		36-97	3		30
3,3'-Dichlorobenzidine	42		69		40-140	49	Q	30
2,4-Dinitrotoluene	84		74		48-143	13		30
2,6-Dinitrotoluene	85		77		40-140	10		30
Fluoranthene	90		79		40-140	13		30
4-Chlorophenyl phenyl ether	84		79		40-140	6		30
4-Bromophenyl phenyl ether	88		81		40-140	8		30
Bis(2-chloroisopropyl)ether	74		73		40-140	1		30
Bis(2-chloroethoxy)methane	86		79		40-140	8		30
Hexachlorobutadiene	78		77		40-140	1		30
Hexachlorocyclopentadiene	66		67		40-140	2		30
Hexachloroethane	72		72		40-140	0		30
Isophorone	90		84		40-140	7		30
Naphthalene	77		75		40-140	3		30
Nitrobenzene	79		76		40-140	4		30
NDPA/DPA	86		83		40-140	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198362-2 WG1198362-3								
n-Nitrosodi-n-propylamine	96		90		29-132	6		30
Bis(2-ethylhexyl)phthalate	91		90		40-140	1		30
Butyl benzyl phthalate	84		81		40-140	4		30
Di-n-butylphthalate	87		77		40-140	12		30
Di-n-octylphthalate	85		85		40-140	0		30
Diethyl phthalate	94		83		40-140	12		30
Dimethyl phthalate	92		83		40-140	10		30
Benzo(a)anthracene	94		87		40-140	8		30
Benzo(a)pyrene	89		81		40-140	9		30
Benzo(b)fluoranthene	91		82		40-140	10		30
Benzo(k)fluoranthene	97		84		40-140	14		30
Chrysene	89		79		40-140	12		30
Acenaphthylene	86		79		45-123	8		30
Anthracene	88		81		40-140	8		30
Benzo(ghi)perylene	91		84		40-140	8		30
Fluorene	88		80		40-140	10		30
Phenanthrene	84		74		40-140	13		30
Dibenzo(a,h)anthracene	91		82		40-140	10		30
Indeno(1,2,3-cd)pyrene	86		82		40-140	5		30
Pyrene	86		75		26-127	14		30
Biphenyl	88		81		40-140	8		30
4-Chloroaniline	43		65		40-140	41	Q	30
2-Nitroaniline	83		76		52-143	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198362-2 WG1198362-3								
3-Nitroaniline	66		71		25-145	7		30
4-Nitroaniline	76		74		51-143	3		30
Dibenzofuran	82		77		40-140	6		30
2-Methylnaphthalene	84		77		40-140	9		30
1,2,4,5-Tetrachlorobenzene	81		77		2-134	5		30
Acetophenone	89		85		39-129	5		30
2,4,6-Trichlorophenol	79		76		30-130	4		30
p-Chloro-m-cresol	87		81		23-97	7		30
2-Chlorophenol	80		78		27-123	3		30
2,4-Dichlorophenol	81		78		30-130	4		30
2,4-Dimethylphenol	29	Q	78		30-130	92	Q	30
2-Nitrophenol	79		74		30-130	7		30
4-Nitrophenol	67		62		10-80	8		30
2,4-Dinitrophenol	70		68		20-130	3		30
4,6-Dinitro-o-cresol	77		70		20-164	10		30
Pentachlorophenol	80		77		9-103	4		30
Phenol	62		61		12-110	2		30
2-Methylphenol	69		78		30-130	12		30
3-Methylphenol/4-Methylphenol	79		77		30-130	3		30
2,4,5-Trichlorophenol	84		75		30-130	11		30
Benzoic Acid	65		66		10-164	2		30
Benzyl Alcohol	84		82		26-116	2		30
Carbazole	91		81		55-144	12		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198362-2 WG1198362-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	67		69		21-120
Phenol-d6	60		60		10-120
Nitrobenzene-d5	81		79		23-120
2-Fluorobiphenyl	82		78		15-120
2,4,6-Tribromophenol	75		75		10-120
4-Terphenyl-d14	85		72		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1198363-2 WG1198363-3								
Acenaphthene	73		78		40-140	7		40
2-Chloronaphthalene	70		74		40-140	6		40
Fluoranthene	84		89		40-140	6		40
Hexachlorobutadiene	70		74		40-140	6		40
Naphthalene	73		77		40-140	5		40
Benzo(a)anthracene	86		91		40-140	6		40
Benzo(a)pyrene	95		100		40-140	5		40
Benzo(b)fluoranthene	93		100		40-140	7		40
Benzo(k)fluoranthene	94		98		40-140	4		40
Chrysene	81		87		40-140	7		40
Acenaphthylene	79		84		40-140	6		40
Anthracene	86		91		40-140	6		40
Benzo(ghi)perylene	88		95		40-140	8		40
Fluorene	77		81		40-140	5		40
Phenanthrene	80		86		40-140	7		40
Dibenzo(a,h)anthracene	91		98		40-140	7		40
Indeno(1,2,3-cd)pyrene	92		99		40-140	7		40
Pyrene	82		88		40-140	7		40
2-Methylnaphthalene	72		77		40-140	7		40
Pentachlorophenol	72		77		40-140	7		40
Hexachlorobenzene	75		80		40-140	6		40
Hexachloroethane	74		76		40-140	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1198363-2 WG1198363-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	65		67		21-120
Phenol-d6	54		56		10-120
Nitrobenzene-d5	84		88		23-120
2-Fluorobiphenyl	71		76		15-120
2,4,6-Tribromophenol	80		79		10-120
4-Terphenyl-d14	74		80		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198362-4 WG1198362-5 QC Sample: L1901865-02 Client ID: RMW04_011519												
1,2,4-Trichlorobenzene	ND	18.2	15	83		14	77		39-98	7		30
Bis(2-chloroethyl)ether	ND	18.2	15	83		15	83		40-140	0		30
1,2-Dichlorobenzene	ND	18.2	14	77		14	77		40-140	0		30
1,3-Dichlorobenzene	ND	18.2	13	72		13	72		40-140	0		30
1,4-Dichlorobenzene	ND	18.2	14	77		14	77		36-97	0		30
3,3'-Dichlorobenzidine	ND	18.2	3.2J	18	Q	3.5J	19	Q	40-140	9		30
2,4-Dinitrotoluene	ND	18.2	16	88		15	83		48-143	6		30
2,6-Dinitrotoluene	ND	18.2	16	88		15	83		40-140	6		30
4-Chlorophenyl phenyl ether	ND	18.2	15	83		15	83		40-140	0		30
4-Bromophenyl phenyl ether	ND	18.2	17	94		15	83		40-140	13		30
Bis(2-chloroisopropyl)ether	ND	18.2	14	77		14	77		40-140	0		30
Bis(2-chloroethoxy)methane	ND	18.2	16	88		16	88		40-140	0		30
Hexachlorocyclopentadiene	ND	18.2	14.J	77		13.J	72		40-140	7		30
Isophorone	ND	18.2	17	94		17	94		40-140	0		30
Nitrobenzene	ND	18.2	15	83		15	83		40-140	0		30
NDPA/DPA	ND	18.2	16	88		15	83		40-140	6		30
n-Nitrosodi-n-propylamine	ND	18.2	18	99		17	94		29-132	6		30
Bis(2-ethylhexyl)phthalate	2.1J	18.2	18	99		18	99		40-140	0		30
Butyl benzyl phthalate	ND	18.2	19	100		18	99		40-140	5		30
Di-n-butylphthalate	ND	18.2	17	94		16	88		40-140	6		30
Di-n-octylphthalate	ND	18.2	19	100		18	99		40-140	5		30
Diethyl phthalate	ND	18.2	17	94		16	88		40-140	6		30
Dimethyl phthalate	ND	18.2	17	94		16	88		40-140	6		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198362-4 WG1198362-5 QC Sample: L1901865-02 Client ID: RMW04_011519												
Biphenyl	ND	18.2	16	88		16	88		40-140	0		30
4-Chloroaniline	ND	18.2	7.3	40		7.2	40		40-140	1		30
2-Nitroaniline	ND	18.2	16	88		16	88		52-143	0		30
3-Nitroaniline	ND	18.2	9.4	52		9.7	53		25-145	3		30
4-Nitroaniline	ND	18.2	14	77		13	72		51-143	7		30
Dibenzofuran	ND	18.2	15	83		15	83		40-140	0		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	15	83		15	83		2-134	0		30
Acetophenone	ND	18.2	17	94		17	94		39-129	0		30
2,4,6-Trichlorophenol	ND	18.2	16	88		16	88		30-130	0		30
p-Chloro-m-cresol	ND	18.2	17	94		16	88		23-97	6		30
2-Chlorophenol	ND	18.2	15	83		15	83		27-123	0		30
2,4-Dichlorophenol	ND	18.2	16	88		15	83		30-130	6		30
2,4-Dimethylphenol	ND	18.2	7.4	41		6.2	34		30-130	18		30
2-Nitrophenol	ND	18.2	15	83		15	83		30-130	0		30
4-Nitrophenol	ND	18.2	14	77		14	77		10-80	0		30
2,4-Dinitrophenol	ND	18.2	16.J	88		16.J	88		20-130	0		30
4,6-Dinitro-o-cresol	ND	18.2	16	88		14	77		20-164	13		30
Phenol	ND	18.2	12	66		12	66		12-110	0		30
2-Methylphenol	ND	18.2	14	77		13	72		30-130	7		30
3-Methylphenol/4-Methylphenol	ND	18.2	15	83		15	83		30-130	0		30
2,4,5-Trichlorophenol	ND	18.2	16	88		16	88		30-130	0		30
Benzoic Acid	ND	18.2	18.J	99		18.J	99		10-164	0		30
Benzyl Alcohol	ND	18.2	17	94		17	94		26-116	0		30

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198362-4 WG1198362-5 QC Sample: L1901865-02 Client ID: RMW04_011519												
Carbazole	ND	18.2	17	94		16	88		55-144	6		30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	82		76		10-120
2-Fluorobiphenyl	87		82		15-120
2-Fluorophenol	73		73		21-120
4-Terphenyl-d14	86		79		41-149
Nitrobenzene-d5	85		82		23-120
Phenol-d6	66		65		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198363-4 WG1198363-5 QC Sample: L1901865-02 Client ID: RMW04_011519												
Acenaphthene	3.3	18.2	20	92		19	86		40-140	5		40
2-Chloronaphthalene	ND	18.2	16	88		15	83		40-140	6		40
Fluoranthene	0.57	18.2	19	100		18	96		40-140	5		40
Hexachlorobutadiene	ND	18.2	15	83		15	83		40-140	0		40
Naphthalene	3.3	18.2	20	92		19	86		40-140	5		40
Benzo(a)anthracene	0.18	18.2	19	100		18	98		40-140	5		40
Benzo(a)pyrene	0.18	18.2	20	110		19	100		40-140	5		40
Benzo(b)fluoranthene	0.21	18.2	19	100		18	98		40-140	5		40
Benzo(k)fluoranthene	0.07J	18.2	20	110		19	100		40-140	5		40
Chrysene	0.15	18.2	18	98		17	93		40-140	6		40
Acenaphthylene	0.23	18.2	18	98		17	92		40-140	6		40
Anthracene	0.21	18.2	19	100		18	98		40-140	5		40
Benzo(ghi)perylene	0.15	18.2	21	110		20	110		40-140	5		40
Fluorene	0.46	18.2	17	91		16	85		40-140	6		40
Phenanthrene	0.84	18.2	19	100		18	94		40-140	5		40
Dibenzo(a,h)anthracene	0.04J	18.2	21	120		20	110		40-140	5		40
Indeno(1,2,3-cd)pyrene	0.11	18.2	22	120		21	110		40-140	5		40
Pyrene	0.87	18.2	19	100		18	94		40-140	5		40
2-Methylnaphthalene	0.30	18.2	16	86		15	81		40-140	6		40
Pentachlorophenol	9.2	18.2	28	100		26	92		40-140	7		40
Hexachlorobenzene	ND	18.2	16	88		16	88		40-140	0		40
Hexachloroethane	ND	18.2	16	88		15	83		40-140	6		40

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatiles Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198363-4 WG1198363-5 QC Sample: L1901865-02
Client ID: RMW04_011519

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	91		84		10-120
2-Fluorobiphenyl	85		81		15-120
2-Fluorophenol	77		74		21-120
4-Terphenyl-d14	87		80		41-149
Nitrobenzene-d5	91		87		23-120
Phenol-d6	66		64		10-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
Client ID: RMW03_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/20/19 21:04
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		30-150	B
Decachlorobiphenyl	101		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
Client ID: RMW04_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/20/19 23:19
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
Client ID: RMW05_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/20/19 21:17
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
Client ID: GWDUP01_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/22/19 11:35
Analyst: AWS

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	107		30-150	B
Decachlorobiphenyl	118		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/21/19 00:41
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 04:01
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/17/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198386-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	82		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198386-2 WG1198386-3									
Aroclor 1016	75		66		40-140	13		50	A
Aroclor 1260	79		71		40-140	11		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		76		30-150	A
Decachlorobiphenyl	100		83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		80		30-150	B
Decachlorobiphenyl	99		90		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198386-4 WG1198386-5 QC Sample: L1901865-02 Client ID: RMW04_011519													
Aroclor 1016	ND	1.78	1.48	83		1.25	70		40-140	17		50	A
Aroclor 1260	ND	1.78	1.29	72		1.16	65		40-140	11		50	A

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
2,4,5,6-Tetrachloro-m-xylene	83		71		30-150	A
Decachlorobiphenyl	67		58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		76		30-150	B
Decachlorobiphenyl	73		63		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 12:41
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 02:10

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	B
2,4,5-T	ND		ug/l	2.00	0.531	1	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	91		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01 D
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/21/19 22:13
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 16:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.143	0.033	10	A
Lindane	ND		ug/l	0.143	0.031	10	A
Alpha-BHC	ND		ug/l	0.143	0.031	10	A
Beta-BHC	ND		ug/l	0.143	0.040	10	A
Heptachlor	ND		ug/l	0.143	0.022	10	A
Aldrin	ND		ug/l	0.143	0.015	10	A
Heptachlor epoxide	ND		ug/l	0.143	0.030	10	A
Endrin	ND		ug/l	0.286	0.031	10	A
Endrin aldehyde	ND		ug/l	0.286	0.058	10	A
Endrin ketone	ND		ug/l	0.286	0.034	10	A
Dieldrin	ND		ug/l	0.286	0.031	10	A
4,4'-DDE	ND		ug/l	0.286	0.027	10	A
4,4'-DDD	ND		ug/l	0.286	0.033	10	A
4,4'-DDT	ND		ug/l	0.286	0.031	10	A
Endosulfan I	ND		ug/l	0.143	0.025	10	A
Endosulfan II	ND		ug/l	0.286	0.037	10	A
Endosulfan sulfate	ND		ug/l	0.286	0.034	10	A
Methoxychlor	ND		ug/l	1.43	0.049	10	A
Toxaphene	ND		ug/l	1.43	0.448	10	A
cis-Chlordane	ND		ug/l	0.143	0.048	10	A
trans-Chlordane	ND		ug/l	0.143	0.045	10	A
Chlordane	ND		ug/l	1.43	0.331	10	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-01 D

Date Collected: 01/15/19 15:30

Client ID: RMW03_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	116		30-150	B
Decachlorobiphenyl	128		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/22/19 11:30
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/22/19 01:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-02

Date Collected: 01/15/19 13:00

Client ID: RMW04_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	99		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 11:44
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 02:10

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	B
2,4,5-T	ND		ug/l	2.00	0.531	1	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	91		30-150	A
DCAA	83		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 13:00
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 02:10

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	B
2,4,5-T	ND		ug/l	2.00	0.531	1	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	77		30-150	A
DCAA	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03 D
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/21/19 22:25
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 16:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.714	0.167	50	A
Lindane	ND		ug/l	0.714	0.155	50	A
Alpha-BHC	ND		ug/l	0.714	0.157	50	A
Beta-BHC	ND		ug/l	0.714	0.200	50	A
Heptachlor	ND		ug/l	0.714	0.111	50	A
Aldrin	ND		ug/l	0.714	0.077	50	A
Heptachlor epoxide	ND		ug/l	0.714	0.148	50	A
Endrin	ND		ug/l	1.43	0.153	50	A
Endrin aldehyde	ND		ug/l	1.43	0.289	50	A
Endrin ketone	ND		ug/l	1.43	0.170	50	A
Dieldrin	ND		ug/l	1.43	0.153	50	A
4,4'-DDE	ND		ug/l	1.43	0.136	50	A
4,4'-DDD	ND		ug/l	1.43	0.166	50	A
4,4'-DDT	ND		ug/l	1.43	0.154	50	A
Endosulfan I	ND		ug/l	0.714	0.123	50	A
Endosulfan II	ND		ug/l	1.43	0.185	50	A
Endosulfan sulfate	ND		ug/l	1.43	0.172	50	A
Methoxychlor	ND		ug/l	7.14	0.244	50	A
Toxaphene	ND		ug/l	7.14	2.24	50	A
cis-Chlordane	ND		ug/l	0.714	0.238	50	A
trans-Chlordane	ND		ug/l	0.714	0.224	50	A
Chlordane	ND		ug/l	7.14	1.65	50	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-03 D

Date Collected: 01/15/19 11:00

Client ID: RMW05_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 20:46
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 02:10

Methylation Date: 01/19/19 07:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	B
2,4,5-T	ND		ug/l	2.00	0.531	1	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	108		30-150	A
DCAA	92		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04 D
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/21/19 22:38
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.071	0.017	5	A
Lindane	ND		ug/l	0.071	0.016	5	A
Alpha-BHC	ND		ug/l	0.071	0.016	5	A
Beta-BHC	ND		ug/l	0.071	0.020	5	A
Heptachlor	ND		ug/l	0.071	0.011	5	A
Aldrin	ND		ug/l	0.071	0.008	5	A
Heptachlor epoxide	ND		ug/l	0.071	0.015	5	A
Endrin	ND		ug/l	0.143	0.015	5	A
Endrin aldehyde	ND		ug/l	0.143	0.029	5	A
Endrin ketone	ND		ug/l	0.143	0.017	5	A
Dieldrin	ND		ug/l	0.143	0.015	5	A
4,4'-DDE	ND		ug/l	0.143	0.014	5	A
4,4'-DDD	ND		ug/l	0.143	0.017	5	A
4,4'-DDT	ND		ug/l	0.143	0.015	5	A
Endosulfan I	ND		ug/l	0.071	0.012	5	A
Endosulfan II	ND		ug/l	0.143	0.019	5	A
Endosulfan sulfate	ND		ug/l	0.143	0.017	5	A
Methoxychlor	ND		ug/l	0.714	0.024	5	A
Toxaphene	ND		ug/l	0.714	0.224	5	A
cis-Chlordane	ND		ug/l	0.071	0.024	5	A
trans-Chlordane	ND		ug/l	0.071	0.022	5	A
Chlordane	ND		ug/l	0.714	0.165	5	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04 D
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	30		30-150	A
Decachlorobiphenyl	31		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/17/19 22:13
Analyst: SL

Extraction Method: EPA 3510C
Extraction Date: 01/16/19 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,03-04 Batch: WG1198266-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/17/19 22:13
 Analyst: SL

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,03-04 Batch: WG1198266-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
Analytical Date: 01/19/19 14:10
Analyst: DGM

Extraction Method: EPA 8151A
Extraction Date: 01/17/19 08:10

Methylation Date: 01/17/19 17:55

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198737-1						
2,4-D	ND		ug/l	10.0	0.498	B
2,4,5-T	ND		ug/l	2.00	0.531	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	6	Q	30-150	A
DCAA	30		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/22/19 10:52
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1199589-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/22/19 10:52
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1199589-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	90		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-04 Batch: WG1198266-2 WG1198266-3									
Delta-BHC	92		85		30-150	9		20	A
Lindane	93		85		30-150	9		20	A
Alpha-BHC	99		89		30-150	11		20	A
Beta-BHC	88		79		30-150	11		20	A
Heptachlor	94		85		30-150	11		20	A
Aldrin	92		82		30-150	11		20	A
Heptachlor epoxide	98		89		30-150	10		20	A
Endrin	102		91		30-150	11		20	A
Endrin aldehyde	79		75		30-150	5		20	A
Endrin ketone	104		94		30-150	10		20	A
Dieldrin	108		99		30-150	8		20	A
4,4'-DDE	101		91		30-150	10		20	A
4,4'-DDD	99		89		30-150	12		20	A
4,4'-DDT	106		94		30-150	12		20	A
Endosulfan I	93		85		30-150	9		20	A
Endosulfan II	94		86		30-150	9		20	A
Endosulfan sulfate	92		83		30-150	9		20	A
Methoxychlor	120		106		30-150	12		20	A
cis-Chlordane	52		80		30-150	42	Q	20	A
trans-Chlordane	95		85		30-150	11		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-04 Batch: WG1198266-2 WG1198266-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	78		69		30-150	A
Decachlorobiphenyl	101		82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		73		30-150	B
Decachlorobiphenyl	104		87		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198737-2 WG1198737-3									
2,4-D	42		44		30-150	5		25	B
2,4,5-T	58		55		30-150	5		25	B
2,4,5-TP (Silvex)	53		48		30-150	10		25	B

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	12	Q	20	Q	30-150	A
DCAA	34		41		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1199589-2 WG1199589-3									
Delta-BHC	83		87		30-150	5		20	A
Lindane	81		85		30-150	4		20	A
Alpha-BHC	85		90		30-150	5		20	A
Beta-BHC	91		97		30-150	6		20	A
Heptachlor	79		87		30-150	10		20	A
Aldrin	75		85		30-150	12		20	A
Heptachlor epoxide	91		95		30-150	5		20	A
Endrin	87		91		30-150	5		20	A
Endrin aldehyde	77		78		30-150	0		20	A
Endrin ketone	91		95		30-150	4		20	A
Dieldrin	91		96		30-150	5		20	A
4,4'-DDE	83		90		30-150	8		20	A
4,4'-DDD	85		91		30-150	7		20	A
4,4'-DDT	88		89		30-150	2		20	A
Endosulfan I	84		85		30-150	1		20	A
Endosulfan II	83		88		30-150	6		20	A
Endosulfan sulfate	86		89		30-150	3		20	A
Methoxychlor	96		99		30-150	4		20	A
cis-Chlordane	76		81		30-150	7		20	A
trans-Chlordane	75		82		30-150	9		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1199589-2 WG1199589-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	78		84		30-150	A
Decachlorobiphenyl	74		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		90		30-150	B
Decachlorobiphenyl	79		89		30-150	B

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198737-4 WG1198737-5 QC Sample: L1901865-02 Client ID: RMW04_011519													
2,4-D	ND	5	4.19J	84		4.07J	81		30-150	3		25	B
2,4,5-T	ND	5	4.50	90		4.56	91		30-150	1		25	B
2,4,5-TP (Silvex)	ND	5	4.14	83		4.24	85		30-150	2		25	B

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
DCAA	91		97		30-150	A
DCAA	236	Q	227	Q	30-150	B



Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1199589-6 WG1199589-7 QC Sample: L1901865-02 Client ID: RMW04_011519													
Delta-BHC	ND	0.357	0.349	98		0.362	101		30-150	4		30	A
Lindane	ND	0.357	0.320	90		0.338	95		30-150	5		30	A
Alpha-BHC	ND	0.357	0.363	102		0.368	103		30-150	1		30	A
Beta-BHC	ND	0.357	0.328	92		0.349	98		30-150	6		30	A
Heptachlor	ND	0.357	0.328	92		0.336	94		30-150	2		30	A
Aldrin	ND	0.357	0.330	92		0.339	95		30-150	3		30	A
Heptachlor epoxide	ND	0.357	0.370	104		0.378	106		30-150	2		30	A
Endrin	ND	0.357	0.376	105		0.383	107		30-150	2		30	A
Endrin aldehyde	ND	0.357	0.335	94		0.344	96		30-150	3		30	A
Endrin ketone	ND	0.357	0.388	109		0.399	112		30-150	3		30	A
Dieldrin	ND	0.357	0.384	108		0.391	109		30-150	2		30	A
4,4'-DDE	ND	0.357	0.352	99		0.358	100		30-150	2		30	A
4,4'-DDD	ND	0.357	0.363	102		0.371	104		30-150	2		30	A
4,4'-DDT	ND	0.357	0.355	99		0.358	100		30-150	1		30	A
Endosulfan I	ND	0.357	0.343	96		0.353	99		30-150	3		30	A
Endosulfan II	ND	0.357	0.359	101		0.365	102		30-150	2		30	A
Endosulfan sulfate	ND	0.357	0.380	106		0.380	106		30-150	0		30	A
Methoxychlor	ND	0.357	0.408	114		0.425	119		30-150	4		30	A
cis-Chlordane	ND	0.357	0.330	92		0.332	93		30-150	1		30	A
trans-Chlordane	ND	0.357	0.329	92		0.337	94		30-150	2		30	A

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1199589-6 WG1199589-7 QC Sample: L1901865-02 Client ID: RMW04_011519

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	98		98		30-150	A
Decachlorobiphenyl	61		55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		97		30-150	B
Decachlorobiphenyl	76		69		30-150	B

METALS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.225		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Antimony, Total	0.00067	J	mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00155		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Barium, Total	0.4160		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Calcium, Total	427.		mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Chromium, Total	0.00294		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00040	J	mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Copper, Total	0.00258		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Iron, Total	0.984		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Lead, Total	0.00777		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Magnesium, Total	59.1		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Manganese, Total	0.9509		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 22:02	EPA 7470A	1,7470A	MG
Nickel, Total	0.00383		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Potassium, Total	25.2		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Sodium, Total	377.		mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Zinc, Total	0.00560	J	mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/17/19 13:16	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00443	J	mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00179	J	mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00091		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.4057		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Calcium, Dissolved	423.		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00069	J	mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00018	J	mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.439		mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	57.6		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.9551		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00006	J	mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:52	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00183	J	mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Potassium, Dissolved	25.3		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Sodium, Dissolved	370.		mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00025	J	mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.14		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Antimony, Total	0.00364	J	mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00221		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Barium, Total	0.4032		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Calcium, Total	354.		mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Chromium, Total	0.00644		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00178		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Copper, Total	0.00712		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Iron, Total	8.99		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Lead, Total	0.03752		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Magnesium, Total	52.7		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Manganese, Total	1.036		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Mercury, Total	0.00009	J	mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 21:52	EPA 7470A	1,7470A	MG
Nickel, Total	0.00566		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Potassium, Total	23.1		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Sodium, Total	189.		mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Thallium, Total	0.00024	J	mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00416	J	mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Zinc, Total	0.01978		mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/17/19 12:35	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00522	J	mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00208	J	mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00149		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.3518		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Calcium, Dissolved	327.		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00033	J	mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00059		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Iron, Dissolved	5.87		mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	49.6		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.9776		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:41	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00233		mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Potassium, Dissolved	21.5		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Sodium, Dissolved	181.		mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00020	J	mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.58		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Antimony, Total	0.00131	J	mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00144		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Barium, Total	0.2146		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00010	J	mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00007	J	mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Calcium, Total	151.		mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Chromium, Total	0.01169		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00176		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Copper, Total	0.01153		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Iron, Total	3.20		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Lead, Total	0.05522		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Magnesium, Total	80.6		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Manganese, Total	0.3425		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Mercury, Total	0.00020		mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 22:04	EPA 7470A	1,7470A	MG
Nickel, Total	0.00759		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Potassium, Total	29.6		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Sodium, Total	43.8		mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00515		mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Zinc, Total	0.03200		mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	0.011		mg/l	0.010	0.010	1		01/17/19 12:39	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00551	J	mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00072	J	mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00036	J	mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1601		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Calcium, Dissolved	147.		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00115		mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00020	J	mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.313		mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	80.8		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.2947		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:53	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00059	J	mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Potassium, Dissolved	29.2		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Sodium, Dissolved	44.1		mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-04

Date Collected: 01/15/19 00:00

Client ID: GWDUP01_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.221		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00143		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Barium, Total	0.4095		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Calcium, Total	417.		mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Chromium, Total	0.00284		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00041	J	mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Copper, Total	0.00247		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Iron, Total	0.919		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Lead, Total	0.00767		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Magnesium, Total	57.1		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Manganese, Total	0.9354		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 22:06	EPA 7470A	1,7470A	MG
Nickel, Total	0.00365		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Potassium, Total	24.8		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Sodium, Total	369.		mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Zinc, Total	0.00549	J	mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/17/19 12:02	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-04

Date Collected: 01/15/19 00:00

Client ID: GWDUP01_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00543	J	mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00048	J	mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00064		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.4194		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Calcium, Dissolved	421.		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00066	J	mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00017	J	mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.418		mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	58.0		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.9654		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:55	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00148	J	mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Potassium, Dissolved	25.4		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Sodium, Dissolved	371.		mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198177-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Antimony, Total	0.00045	J	mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Calcium, Total	0.0394	J	mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Sodium, Total	0.0432	J	mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198197-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 21:49	1,7470A	MG



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198261-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Chromium, Dissolved	0.00022	J	mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Iron, Dissolved	0.0328	J	mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Sodium, Dissolved	0.0384	J	mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198576-1									
Mercury, Dissolved	ND	mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:38	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198177-2								
Aluminum, Total	102		-		80-120	-		
Antimony, Total	96		-		80-120	-		
Arsenic, Total	104		-		80-120	-		
Barium, Total	104		-		80-120	-		
Beryllium, Total	104		-		80-120	-		
Cadmium, Total	110		-		80-120	-		
Calcium, Total	100		-		80-120	-		
Chromium, Total	100		-		80-120	-		
Cobalt, Total	101		-		80-120	-		
Copper, Total	96		-		80-120	-		
Iron, Total	111		-		80-120	-		
Lead, Total	107		-		80-120	-		
Magnesium, Total	105		-		80-120	-		
Manganese, Total	99		-		80-120	-		
Nickel, Total	100		-		80-120	-		
Potassium, Total	102		-		80-120	-		
Selenium, Total	106		-		80-120	-		
Silver, Total	102		-		80-120	-		
Sodium, Total	100		-		80-120	-		
Thallium, Total	105		-		80-120	-		
Vanadium, Total	102		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198177-2					
Zinc, Total	108	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198197-2					
Mercury, Total	112	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198261-2					
Aluminum, Dissolved	102	-	80-120	-	
Antimony, Dissolved	91	-	80-120	-	
Arsenic, Dissolved	109	-	80-120	-	
Barium, Dissolved	104	-	80-120	-	
Beryllium, Dissolved	109	-	80-120	-	
Cadmium, Dissolved	113	-	80-120	-	
Calcium, Dissolved	106	-	80-120	-	
Chromium, Dissolved	105	-	80-120	-	
Cobalt, Dissolved	106	-	80-120	-	
Copper, Dissolved	103	-	80-120	-	
Iron, Dissolved	108	-	80-120	-	
Lead, Dissolved	110	-	80-120	-	
Magnesium, Dissolved	107	-	80-120	-	
Manganese, Dissolved	104	-	80-120	-	
Nickel, Dissolved	105	-	80-120	-	
Potassium, Dissolved	104	-	80-120	-	
Selenium, Dissolved	112	-	80-120	-	
Silver, Dissolved	105	-	80-120	-	
Sodium, Dissolved	102	-	80-120	-	
Thallium, Dissolved	108	-	80-120	-	
Vanadium, Dissolved	106	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198261-2					
Zinc, Dissolved	112	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198576-2					
Mercury, Dissolved	109	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MS Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198177-3 WG1198177-4 QC Sample: L1901865-02 Client ID: RMW04_011519												
Aluminum, Total	1.14	2	3.53	120		3.54	120		75-125	0		20
Antimony, Total	0.00364J	0.5	0.5288	106		0.5460	109		75-125	3		20
Arsenic, Total	0.00221	0.12	0.1276	104		0.1333	109		75-125	4		20
Barium, Total	0.4032	2	2.448	102		2.496	105		75-125	2		20
Beryllium, Total	ND	0.05	0.05233	105		0.05326	106		75-125	2		20
Cadmium, Total	ND	0.051	0.05462	107		0.05683	111		75-125	4		20
Calcium, Total	354.	10	379	250	Q	385	310	Q	75-125	2		20
Chromium, Total	0.00644	0.2	0.2042	99		0.2102	102		75-125	3		20
Cobalt, Total	0.00178	0.5	0.4913	98		0.5074	101		75-125	3		20
Copper, Total	0.00712	0.25	0.2391	93		0.2505	97		75-125	5		20
Iron, Total	8.99	1	10.5	151	Q	10.6	161	Q	75-125	1		20
Lead, Total	0.03752	0.51	0.5925	109		0.6042	111		75-125	2		20
Magnesium, Total	52.7	10	67.9	152	Q	69.5	168	Q	75-125	2		20
Manganese, Total	1.036	0.5	1.590	111		1.592	111		75-125	0		20
Nickel, Total	0.00566	0.5	0.4833	96		0.5004	99		75-125	3		20
Potassium, Total	23.1	10	35.0	119		34.8	117		75-125	1		20
Selenium, Total	ND	0.12	0.128	107		0.126	105		75-125	105		20
Silver, Total	ND	0.05	0.04963	99		0.05158	103		75-125	4		20
Sodium, Total	189.	10	218	290	Q	220	310	Q	75-125	1		20
Thallium, Total	0.00024J	0.12	0.1270	106		0.1294	108		75-125	2		20
Vanadium, Total	0.00416J	0.5	0.5211	104		0.5211	104		75-125	0		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 RMW04_011519 QC Batch ID: WG1198177-3 WG1198177-4 QC Sample: L1901865-02 Client ID:									
Zinc, Total	0.01978	0.5	0.6257	121	0.5534	107	75-125	12	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 RMW04_011519 QC Batch ID: WG1198197-3 WG1198197-4 QC Sample: L1901865-02 Client ID:									
Mercury, Total	0.00009J	0.005	0.00464	93	0.00474	95	75-125	2	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198261-3 WG1198261-4 QC Sample: L1901865-02 Client ID: RMW04_011519									
Aluminum, Dissolved	0.00522J	2	2.05	102	2.12	106	75-125	3	20
Antimony, Dissolved	0.00208J	0.5	0.5082	102	0.5344	107	75-125	5	20
Arsenic, Dissolved	0.00149	0.12	0.1281	106	0.1349	111	75-125	5	20
Barium, Dissolved	0.3518	2	2.418	103	2.537	109	75-125	5	20
Beryllium, Dissolved	ND	0.05	0.05236	105	0.05331	107	75-125	2	20
Cadmium, Dissolved	ND	0.051	0.05600	110	0.05904	116	75-125	5	20
Calcium, Dissolved	327.	10	359	320	Q 378	510	Q 75-125	5	20
Chromium, Dissolved	0.00033J	0.2	0.2014	101	0.2090	104	75-125	4	20
Cobalt, Dissolved	0.00059	0.5	0.5014	100	0.5223	104	75-125	4	20
Copper, Dissolved	ND	0.25	0.2378	95	0.2546	102	75-125	7	20
Iron, Dissolved	5.87	1	7.28	141	Q 7.72	185	Q 75-125	6	20
Lead, Dissolved	ND	0.51	0.5540	109	0.5861	115	75-125	6	20
Magnesium, Dissolved	49.6	10	65.7	161	Q 67.8	182	Q 75-125	3	20
Manganese, Dissolved	0.9776	0.5	1.503	105	1.569	118	75-125	4	20
Nickel, Dissolved	0.00233	0.5	0.5027	100	0.5298	105	75-125	5	20
Potassium, Dissolved	21.5	10	33.5	120	35.2	137	Q 75-125	5	20
Selenium, Dissolved	ND	0.12	0.128	107	0.138	115	75-125	8	20
Silver, Dissolved	ND	0.05	0.05164	103	0.05378	108	75-125	4	20
Sodium, Dissolved	181.	10	212	310	Q 218	370	Q 75-125	3	20
Thallium, Dissolved	0.00020J	0.12	0.1280	107	0.1358	113	75-125	6	20
Vanadium, Dissolved	ND	0.5	0.5124	102	0.5361	107	75-125	5	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198261-3 WG1198261-4 QC Sample: L1901865-02 Client ID: RMW04_011519									
Zinc, Dissolved	ND	0.5	0.5276	106	0.5495	110	75-125	4	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198576-3 WG1198576-4 QC Sample: L1901865-02 Client ID: RMW04_011519									
Mercury, Dissolved	ND	0.005	0.00416	83	0.00279	56	Q 75-125	39	Q 20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.023		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:49	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:28	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-02

Date Collected: 01/15/19 13:00

Client ID: RMW04_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.037		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:50	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:28	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-03

Date Collected: 01/15/19 11:00

Client ID: RMW05_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.007		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:54	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:29	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-04

Date Collected: 01/15/19 00:00

Client ID: GWDUP01_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.016		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:55	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:29	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1198028-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:27	1,7196A	JT
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1198578-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:29	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1198028-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1198578-2 WG1198578-3								
Cyanide, Total	91		98		85-115	7		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198028-3 WG1198028-4 QC Sample: L1901865-02 Client ID: RMW04_011519										
Chromium, Hexavalent	ND	0.1	0.097	97	0.095	95	85-115	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198578-4 WG1198578-5 QC Sample: L1901865-02 Client ID: RMW04_011519										
Cyanide, Total	0.037	0.2	0.225	94	0.227	95	80-120	1		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198028-5 QC Sample: L1901865-02 Client ID: RMW04_011519						
Chromium, Hexavalent	ND	ND	mg/l	NC		20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01221919:18
Lab Number: L1901865
Report Date: 01/22/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-01A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-01B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-01C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-01D	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901865-01E	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-01F	Plastic 500ml unpreserved	B	7	7	3.6	Y	Absent		HEXCR-7196(1)
L1901865-01G	Plastic 250ml NaOH preserved	B	>12	>12	3.6	Y	Absent		TCN-9010(14)
L1901865-01H	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1901865-01I	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1901865-01J	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1901865-01K	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1901865-01L	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-01M	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-01N	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1901865-01O	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1901865-02A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02A1	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02A2	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02B1	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02B2	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02C1	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02C2	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02D	Plastic 250ml HNO3 preserved	A	<2	<2	2.7	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901865-02D1	Plastic 250ml HNO3 preserved	C	<2	<2	3.4	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901865-02D2	Plastic 250ml HNO3 preserved	C	<2	<2	3.4	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-02E	Plastic 250ml HNO3 preserved	A	<2	<2	2.7	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-02E1	Plastic 250ml HNO3 preserved	C	<2	<2	3.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-02E2	Plastic 250ml HNO3 preserved	C	<2	<2	3.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-02F	Plastic 500ml unpreserved	A	7	7	2.7	Y	Absent		HEXCR-7196(1)
L1901865-02F1	Plastic 500ml unpreserved	C	7	7	3.4	Y	Absent		HEXCR-7196(1)
L1901865-02F2	Plastic 500ml unpreserved	C	7	7	3.4	Y	Absent		HEXCR-7196(1)
L1901865-02G	Plastic 250ml NaOH preserved	A	>12	>12	2.7	Y	Absent		TCN-9010(14)
L1901865-02G1	Plastic 250ml NaOH preserved	C	>12	>12	3.4	Y	Absent		TCN-9010(14)
L1901865-02G2	Plastic 250ml NaOH preserved	C	>12	>12	3.4	Y	Absent		TCN-9010(14)
L1901865-02H	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02H1	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02H2	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02I	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02I1	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02I2	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02J	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8081(7)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-02J1	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8081(7)
L1901865-02J2	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8081(7)
L1901865-02K	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8081(7)
L1901865-02K1	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8081(7)
L1901865-02K2	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8081(7)
L1901865-02L	Amber 250ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02L1	Amber 250ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02L2	Amber 250ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02M	Amber 250ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02M1	Amber 250ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02M2	Amber 250ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02N	Amber 1000ml unpreserved	A	7	7	2.7	Y	Absent		HERB-APA(7)
L1901865-02N1	Amber 1000ml unpreserved	C	7	7	3.4	Y	Absent		HERB-APA(7)
L1901865-02N2	Amber 1000ml unpreserved	C	7	7	3.4	Y	Absent		HERB-APA(7)
L1901865-02O	Amber 1000ml unpreserved	A	7	7	2.7	Y	Absent		HERB-APA(7)
L1901865-02O1	Amber 1000ml unpreserved	C	7	7	3.4	Y	Absent		HERB-APA(7)
L1901865-02O2	Amber 1000ml unpreserved	C	7	7	3.4	Y	Absent		HERB-APA(7)
L1901865-03A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-03B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-03C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-03D	Plastic 250ml HNO3 preserved	A	<2	<2	2.7	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-03E	Plastic 250ml HNO3 preserved	A	<2	<2	2.7	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-03F	Plastic 500ml unpreserved	A	7	7	2.7	Y	Absent		HEXCR-7196(1)
L1901865-03G	Plastic 250ml NaOH preserved	A	>12	>12	2.7	Y	Absent		TCN-9010(14)
L1901865-03H	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8082-LVI(7)
L1901865-03I	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8082-LVI(7)
L1901865-03J	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8081(7)
L1901865-03K	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8081(7)
L1901865-03L	Amber 250ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-03M	Amber 250ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-03N	Amber 1000ml unpreserved	A	7	7	2.7	Y	Absent		HERB-APA(7)
L1901865-03O	Amber 1000ml unpreserved	A	7	7	2.7	Y	Absent		HERB-APA(7)
L1901865-04A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-04B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-04C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-04D	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901865-04E	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-04F	Plastic 500ml unpreserved	B	7	7	3.6	Y	Absent		HEXCR-7196(1)
L1901865-04G	Plastic 250ml NaOH preserved	B	>12	>12	3.6	Y	Absent		TCN-9010(14)
L1901865-04H	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1901865-04I	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1901865-04J	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1901865-04K	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1901865-04L	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-04M	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-04N	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1901865-04O	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1901865-05A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-05B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)

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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



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Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab <i>1/15/19</i>	ALPHA Job # <i>L1901865</i>																																																																																																
		Project Information Project Name: Gerard Ave. + E. 146th St. Project Location: Bronx NY Project # 170487001 (Use Project name as Project #) <input checked="" type="checkbox"/>		Deliverables <input checked="" type="checkbox"/> ASP-A <i>1-15-19</i> <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQulS (1 File) <input checked="" type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #																																																																																															
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: <i>7013</i> Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																															
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.				ANALYSIS				Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		Total Bottles																																																																																											
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">Part 375/TCL VOCs</th> <th rowspan="2">Part 375/TCL SVOCs</th> <th rowspan="2">Part 375/TCL PCBs</th> <th rowspan="2">Pesticides</th> <th rowspan="2">Herbicides</th> <th rowspan="2">TAL Metals</th> <th rowspan="2">Hexavalent Chromium</th> <th rowspan="2">Total Cyanide</th> <th rowspan="2">Sample Specific Comments</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td><i>01865-01</i></td> <td><i>RMW03_011519</i></td> <td><i>1/15/19</i></td> <td><i>1530</i></td> <td><i>GW</i></td> <td><i>JL</i></td> <td><i>X</i></td> <td><i>X</i></td> <td><i>X</i></td> <td><i>X</i></td> <td><i>X</i></td> <td><i>X</i></td> <td><i>X</i></td> <td><i>X</i></td> <td></td> </tr> <tr> <td><i>02</i></td> <td><i>RMW04_011519</i></td> <td><i>↓</i></td> <td><i>1300</i></td> <td><i>↓</i></td> <td><i>JL</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td></td> </tr> <tr> <td><i>03</i></td> <td><i>RMW05_011519</i></td> <td><i>↓</i></td> <td><i>1100</i></td> <td><i>↓</i></td> <td><i>JL</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>Collect MS/MSD</i></td> </tr> <tr> <td><i>04</i></td> <td><i>GWDP01_011519</i></td> <td><i>↓</i></td> <td><i>-</i></td> <td><i>↓</i></td> <td><i>JL</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td><i>↓</i></td> <td></td> </tr> <tr> <td><i>05</i></td> <td><i>GWTC02_011519</i></td> <td><i>-</i></td> <td><i>-</i></td> <td><i>AG</i></td> <td><i>JA</i></td> <td><i>X</i></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials		Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide	Sample Specific Comments	Date	Time	<i>01865-01</i>	<i>RMW03_011519</i>	<i>1/15/19</i>	<i>1530</i>	<i>GW</i>	<i>JL</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		<i>02</i>	<i>RMW04_011519</i>	<i>↓</i>	<i>1300</i>	<i>↓</i>	<i>JL</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>		<i>03</i>	<i>RMW05_011519</i>	<i>↓</i>	<i>1100</i>	<i>↓</i>	<i>JL</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>Collect MS/MSD</i>	<i>04</i>	<i>GWDP01_011519</i>	<i>↓</i>	<i>-</i>	<i>↓</i>	<i>JL</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>		<i>05</i>	<i>GWTC02_011519</i>	<i>-</i>	<i>-</i>	<i>AG</i>	<i>JA</i>	<i>X</i>									Container Type Preservative				Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection				Sample Matrix	Sampler's Initials			Part 375/TCL VOCs										Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide	Sample Specific Comments																																																																										
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Relinquished By: <i>J.L.</i> Date/Time: <i>1/15/19 - 330</i>		Received By: <i>D. Santos</i> Date/Time: <i>1/15/19 15:00</i>		Date/Time: <i>1/15/19 19:00</i>		Date/Time: <i>1/15/19 22:30</i>																																																																																									



ANALYTICAL REPORT

Lab Number:	L1902070
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487003
Report Date:	01/25/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1902070-01	RMW01_011619	WATER	BRONX, NY	01/16/19 10:00	01/16/19
L1902070-02	RMW07_011619	WATER	BRONX, NY	01/16/19 12:00	01/16/19
L1902070-03	RMW09_011619	WATER	BRONX, NY	01/16/19 15:00	01/16/19
L1902070-04	GWFB02_011619	WATER	BRONX, NY	01/16/19 12:45	01/16/19
L1902070-05	GWTB03_011619	WATER	BRONX, NY	01/16/19 00:00	01/16/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Case Narrative (continued)

Report Submission

January 25, 2019: This final report includes the results of all requested analyses.

January 25, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1902070-03: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Semivolatile Organics by SIM

L1902070-04: Naphthalene was identified in the Field Blank. The sample vial was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

Perfluorinated Alkyl Acids by Isotope Dilution

L1902070-03 and WG1198461-2/-3: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

L1902070-04: The Field Blank has a concentration above the reporting limit for 1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS). The result was confirmed.

WG1198573-11: The continuing calibration standard, associated with L1902070 and QC, had the response for the extracted internal standard (Perfluoro[1,2-¹³C₂]Tetradecanoic Acid (M2PFTEDA) (158.7%) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria, therefore no further action was taken.

Total Metals

L1902070-04: The Field Blank has results for barium and manganese present above the reporting limits. The

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Case Narrative (continued)

sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

Dissolved Metals

L1902070-04: The Field Blank has a result for barium present above the reporting limit. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

The WG1198536-3 MS recoveries for calcium (240%), magnesium (134%), and sodium (270%), performed on L1902070-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1198536-3 MS recovery, performed on L1902070-01, is outside the acceptance criteria for selenium (35%). A post digestion spike was performed and was within acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/25/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/18/19 20:54
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	2.5		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	0.97	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	0.97	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	2.1	J	ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	4.3		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	1.3	J	ug/l	2.0	0.70	1
p-Ethyltoluene	5.4		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	10		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	90		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/18/19 21:30
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	91		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03 D
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/21/19 13:22
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	50	14.	20
1,1-Dichloroethane	ND		ug/l	50	14.	20
Chloroform	ND		ug/l	50	14.	20
Carbon tetrachloride	ND		ug/l	10	2.7	20
1,2-Dichloropropane	ND		ug/l	20	2.7	20
Dibromochloromethane	ND		ug/l	10	3.0	20
1,1,2-Trichloroethane	ND		ug/l	30	10.	20
Tetrachloroethene	ND		ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	ND		ug/l	10	2.6	20
1,1,1-Trichloroethane	ND		ug/l	50	14.	20
Bromodichloromethane	ND		ug/l	10	3.8	20
trans-1,3-Dichloropropene	ND		ug/l	10	3.3	20
cis-1,3-Dichloropropene	ND		ug/l	10	2.9	20
1,3-Dichloropropene, Total	ND		ug/l	10	2.9	20
1,1-Dichloropropene	ND		ug/l	50	14.	20
Bromoform	ND		ug/l	40	13.	20
1,1,2,2-Tetrachloroethane	ND		ug/l	10	3.3	20
Benzene	840		ug/l	10	3.2	20
Toluene	48	J	ug/l	50	14.	20
Ethylbenzene	130		ug/l	50	14.	20
Chloromethane	ND		ug/l	50	14.	20
Bromomethane	ND		ug/l	50	14.	20
Vinyl chloride	ND		ug/l	20	1.4	20
Chloroethane	ND		ug/l	50	14.	20
1,1-Dichloroethene	ND		ug/l	10	3.4	20
trans-1,2-Dichloroethene	ND		ug/l	50	14.	20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03 D

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20
1,3-Dichlorobenzene	ND		ug/l	50	14.	20
1,4-Dichlorobenzene	ND		ug/l	50	14.	20
Methyl tert butyl ether	ND		ug/l	50	14.	20
p/m-Xylene	28	J	ug/l	50	14.	20
o-Xylene	ND		ug/l	50	14.	20
Xylenes, Total	28	J	ug/l	50	14.	20
cis-1,2-Dichloroethene	ND		ug/l	50	14.	20
1,2-Dichloroethene, Total	ND		ug/l	50	14.	20
Dibromomethane	ND		ug/l	100	20.	20
1,2,3-Trichloropropane	ND		ug/l	50	14.	20
Acrylonitrile	ND		ug/l	100	30.	20
Styrene	ND		ug/l	50	14.	20
Dichlorodifluoromethane	ND		ug/l	100	20.	20
Acetone	ND		ug/l	100	29.	20
Carbon disulfide	ND		ug/l	100	20.	20
2-Butanone	ND		ug/l	100	39.	20
Vinyl acetate	ND		ug/l	100	20.	20
4-Methyl-2-pentanone	ND		ug/l	100	20.	20
2-Hexanone	ND		ug/l	100	20.	20
Bromochloromethane	ND		ug/l	50	14.	20
2,2-Dichloropropane	ND		ug/l	50	14.	20
1,2-Dibromoethane	ND		ug/l	40	13.	20
1,3-Dichloropropane	ND		ug/l	50	14.	20
1,1,1,2-Tetrachloroethane	ND		ug/l	50	14.	20
Bromobenzene	ND		ug/l	50	14.	20
n-Butylbenzene	ND		ug/l	50	14.	20
sec-Butylbenzene	ND		ug/l	50	14.	20
tert-Butylbenzene	ND		ug/l	50	14.	20
o-Chlorotoluene	ND		ug/l	50	14.	20
p-Chlorotoluene	ND		ug/l	50	14.	20
1,2-Dibromo-3-chloropropane	ND		ug/l	50	14.	20
Hexachlorobutadiene	ND		ug/l	50	14.	20
Isopropylbenzene	130		ug/l	50	14.	20
p-Isopropyltoluene	ND		ug/l	50	14.	20
Naphthalene	370		ug/l	50	14.	20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03 D
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	220		ug/l	50	14.	20
1,2,3-Trichlorobenzene	ND		ug/l	50	14.	20
1,2,4-Trichlorobenzene	ND		ug/l	50	14.	20
1,3,5-Trimethylbenzene	ND		ug/l	50	14.	20
1,2,4-Trimethylbenzene	ND		ug/l	50	14.	20
1,4-Dioxane	ND		ug/l	5000	1200	20
p-Diethylbenzene	ND		ug/l	40	14.	20
p-Ethyltoluene	24	J	ug/l	40	14.	20
1,2,4,5-Tetramethylbenzene	66		ug/l	40	11.	20
Ethyl ether	ND		ug/l	50	14.	20
trans-1,4-Dichloro-2-butene	ND		ug/l	50	14.	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-05
 Client ID: GWTB03_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 00:00
 Date Received: 01/16/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 14:20
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-05
 Client ID: GWTB03_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 00:00
 Date Received: 01/16/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-05
 Client ID: GWTB03_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 00:00
 Date Received: 01/16/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/17/19 09:13
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-05 Batch: WG1198696-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/17/19 09:13
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-05 Batch: WG1198696-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/17/19 09:13
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-05 Batch: WG1198696-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/18/19 12:25
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1198987-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/18/19 12:25
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1198987-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/18/19 12:25
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1198987-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/21/19 09:40
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1199885-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/21/19 09:40
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1199885-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/21/19 09:40
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1199885-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-05 Batch: WG1198696-3 WG1198696-4								
Methylene chloride	92		91		70-130	1		20
1,1-Dichloroethane	96		98		70-130	2		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	90		93		63-132	3		20
1,2-Dichloropropane	96		100		70-130	4		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	95		98		70-130	3		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	72		75		62-150	4		20
1,2-Dichloroethane	95		100		70-130	5		20
1,1,1-Trichloroethane	94		95		67-130	1		20
Bromodichloromethane	96		98		67-130	2		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	93		97		70-130	4		20
1,1-Dichloropropene	89		92		70-130	3		20
Bromoform	99		100		54-136	1		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	91		94		70-130	3		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	54	Q	55	Q	64-130	2		20
Bromomethane	43		29	Q	39-139	39	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-05 Batch: WG1198696-3 WG1198696-4								
Vinyl chloride	75		75		55-140	0		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	78		80		61-145	3		20
trans-1,2-Dichloroethene	90		94		70-130	4		20
Trichloroethene	93		96		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	93		100		63-130	7		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	95		97		70-130	2		20
Dibromomethane	94		98		70-130	4		20
1,2,3-Trichloropropane	100		110		64-130	10		20
Acrylonitrile	92		100		70-130	8		20
Styrene	90		95		70-130	5		20
Dichlorodifluoromethane	56		57		36-147	2		20
Acetone	83		75		58-148	10		20
Carbon disulfide	81		82		51-130	1		20
2-Butanone	93		98		63-138	5		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	88		110		59-130	22	Q	20
2-Hexanone	80		96		57-130	18		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-05 Batch: WG1198696-3 WG1198696-4								
Bromochloromethane	99		100		70-130	1		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	96		100		70-130	4		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	98		100		53-136	2		20
sec-Butylbenzene	99		100		70-130	1		20
tert-Butylbenzene	97		98		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	88		100		41-144	13		20
Hexachlorobutadiene	80		80		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	96		97		70-130	1		20
Naphthalene	84		93		70-130	10		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	86		91		70-130	6		20
1,2,4-Trichlorobenzene	88		89		70-130	1		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	100		100		56-162	0		20
p-Diethylbenzene	93		95		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-05 Batch: WG1198696-3 WG1198696-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	88		89		70-130	1		20
Ethyl ether	86		91		59-134	6		20
trans-1,4-Dichloro-2-butene	96		100		70-130	4		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	99		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1198987-3 WG1198987-4								
Methylene chloride	96		91		70-130	5		20
1,1-Dichloroethane	100		96		70-130	4		20
Chloroform	96		92		70-130	4		20
Carbon tetrachloride	81		78		63-132	4		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	96		95		63-130	1		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	86		85		70-130	1		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	81		78		62-150	4		20
1,2-Dichloroethane	97		96		70-130	1		20
1,1,1-Trichloroethane	86		84		67-130	2		20
Bromodichloromethane	97		93		67-130	4		20
trans-1,3-Dichloropropene	91		89		70-130	2		20
cis-1,3-Dichloropropene	88		86		70-130	2		20
1,1-Dichloropropene	93		92		70-130	1		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	120		120		67-130	0		20
Benzene	97		94		70-130	3		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	75		72		64-130	4		20
Bromomethane	51		45		39-139	13		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1198987-3 WG1198987-4								
Vinyl chloride	87		83		55-140	5		20
Chloroethane	98		94		55-138	4		20
1,1-Dichloroethene	87		84		61-145	4		20
trans-1,2-Dichloroethene	92		91		70-130	1		20
Trichloroethene	91		90		70-130	1		20
1,2-Dichlorobenzene	100		110		70-130	10		20
1,3-Dichlorobenzene	110		110		70-130	0		20
1,4-Dichlorobenzene	110		110		70-130	0		20
Methyl tert butyl ether	81		81		63-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	94		92		70-130	2		20
Dibromomethane	91		91		70-130	0		20
1,2,3-Trichloropropane	120		120		64-130	0		20
Acrylonitrile	100		100		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	74		70		36-147	6		20
Acetone	110		110		58-148	0		20
Carbon disulfide	84		80		51-130	5		20
2-Butanone	120		120		63-138	0		20
Vinyl acetate	120		120		70-130	0		20
4-Methyl-2-pentanone	110		110		59-130	0		20
2-Hexanone	120		120		57-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1198987-3 WG1198987-4								
Bromochloromethane	92		91		70-130	1		20
2,2-Dichloropropane	66		62	Q	63-133	6		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	99		97		64-130	2		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	110		120		53-136	9		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	110		110		70-130	0		20
o-Chlorotoluene	120		120		70-130	0		20
p-Chlorotoluene	120		120		70-130	0		20
1,2-Dibromo-3-chloropropane	93		99		41-144	6		20
Hexachlorobutadiene	94		92		63-130	2		20
Isopropylbenzene	110		120		70-130	9		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	110		120		70-130	9		20
n-Propylbenzene	120		120		69-130	0		20
1,2,3-Trichlorobenzene	100		110		70-130	10		20
1,2,4-Trichlorobenzene	100		110		70-130	10		20
1,3,5-Trimethylbenzene	110		120		64-130	9		20
1,2,4-Trimethylbenzene	110		120		70-130	9		20
1,4-Dioxane	112		116		56-162	4		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1198987-3 WG1198987-4								
p-Ethyltoluene	110		120		70-130	9		20
1,2,4,5-Tetramethylbenzene	110		120		70-130	9		20
Ethyl ether	96		97		59-134	1		20
trans-1,4-Dichloro-2-butene	100		100		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	98		98		70-130
Toluene-d8	108		108		70-130
4-Bromofluorobenzene	111		110		70-130
Dibromofluoromethane	92		91		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1199885-3 WG1199885-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	91		91		63-132	0		20
1,2-Dichloropropane	98		100		70-130	2		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	94		95		70-130	1		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	85		87		62-150	2		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	95		97		67-130	2		20
Bromodichloromethane	99		98		67-130	1		20
trans-1,3-Dichloropropene	100		99		70-130	1		20
cis-1,3-Dichloropropene	98		96		70-130	2		20
1,1-Dichloropropene	92		93		70-130	1		20
Bromoform	100		98		54-136	2		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	97		99		70-130	2		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	76		77		64-130	1		20
Bromomethane	32	Q	36	Q	39-139	12		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1199885-3 WG1199885-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	120		130		55-138	8		20
1,1-Dichloroethene	93		93		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	96		100		70-130	4		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	98		98		63-130	0		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	97		96		70-130	1		20
1,2,3-Trichloropropane	100		100		64-130	0		20
Acrylonitrile	100		95		70-130	5		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	85		85		36-147	0		20
Acetone	62		65		58-148	5		20
Carbon disulfide	120		120		51-130	0		20
2-Butanone	84		82		63-138	2		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	88		86		59-130	2		20
2-Hexanone	80		81		57-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1199885-3 WG1199885-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	97		96		70-130	1		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	93		94		53-136	1		20
sec-Butylbenzene	95		95		70-130	0		20
tert-Butylbenzene	94		95		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	86		90		41-144	5		20
Hexachlorobutadiene	71		74		63-130	4		20
Isopropylbenzene	98		99		70-130	1		20
p-Isopropyltoluene	93		95		70-130	2		20
Naphthalene	84		83		70-130	1		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	88		86		70-130	2		20
1,2,4-Trichlorobenzene	88		88		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	64		92		56-162	36	Q	20
p-Diethylbenzene	90		91		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1199885-3 WG1199885-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	90		89		70-130	1		20
Ethyl ether	98		100		59-134	2		20
trans-1,4-Dichloro-2-butene	100		97		70-130	3		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		95		70-130
Toluene-d8	100		102		70-130
4-Bromofluorobenzene	95		94		70-130
Dibromofluoromethane	97		97		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/19/19 09:05
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	77		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 21:21
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	32		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	2.6		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.52		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.30		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.14		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.14		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.06	J	ug/l	0.10	0.01	1
Chrysene	0.31		ug/l	0.10	0.01	1
Acenaphthylene	3.3		ug/l	0.10	0.01	1
Anthracene	0.85		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.10		ug/l	0.10	0.01	1
Fluorene	1.3		ug/l	0.10	0.01	1
Phenanthrene	0.52		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.03	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.08	J	ug/l	0.10	0.01	1
Pyrene	3.6		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-01

Date Collected: 01/16/19 10:00

Client ID: RMW01_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	84		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/19/19 09:32
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	76		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 13:05
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0326	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 21:48
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.03	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.11		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.06	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.06	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.05	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.01	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.04	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.06	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Pyrene	0.11		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02

Date Collected: 01/16/19 12:00

Client ID: RMW07_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	85		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
Client ID: RMW07_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 03:00
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	4.73		ng/l	1.82	0.339	1
Perfluoropentanoic Acid (PFPeA)	1.73	J	ng/l	1.82	0.422	1
Perfluorobutanesulfonic Acid (PFBS)	3.49		ng/l	1.82	0.345	1
Perfluorohexanoic Acid (PFHxA)	1.66	J	ng/l	1.82	0.447	1
Perfluoroheptanoic Acid (PFHpA)	1.42	J	ng/l	1.82	0.338	1
Perfluorohexanesulfonic Acid (PFHxS)	0.782	J	ng/l	1.82	0.396	1
Perfluorooctanoic Acid (PFOA)	10.8		ng/l	1.82	0.418	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.79	J	ng/l	1.82	0.176	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.82	0.473	1
Perfluorononanoic Acid (PFNA)	0.600	J	ng/l	1.82	0.396	1
Perfluorooctanesulfonic Acid (PFOS)	7.55		ng/l	1.82	0.509	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.82	0.564	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.82	0.264	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.82	0.228	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.82	0.385	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.82	0.351	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.82	0.505	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.82	0.339	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.82	0.538	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.82	0.285	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.82	0.898	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	101		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	74		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	129		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	78		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	98		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	89		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	121		33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/19/19 09:59
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	9.5		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	1.5	J	ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		21-120
Phenol-d6	70		10-120
Nitrobenzene-d5	113		23-120
2-Fluorobiphenyl	94		15-120
2,4,6-Tribromophenol	132	Q	10-120
4-Terphenyl-d14	87		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 13:56
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0314	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	20		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 22:14
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.28		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.48		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	130	E	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.10	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.10		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Chrysene	0.10		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.32		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.05	J	ug/l	0.10	0.01	1
Fluorene	0.19		ug/l	0.10	0.01	1
Phenanthrene	1.3		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.01	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Pyrene	0.40		ug/l	0.10	0.02	1
2-Methylnaphthalene	64		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	33		10-120
4-Terphenyl-d14	89		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
Client ID: RMW09_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 03:17
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	7.08		ng/l	2.07	0.387	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.07	0.481	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.07	0.394	1
Perfluorohexanoic Acid (PFHxA)	2.16		ng/l	2.07	0.510	1
Perfluoroheptanoic Acid (PFHpA)	1.76	J	ng/l	2.07	0.386	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.07	0.452	1
Perfluorooctanoic Acid (PFOA)	17.6		ng/l	2.07	0.477	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.57	J	ng/l	2.07	0.201	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.07	0.539	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.07	0.452	1
Perfluorooctanesulfonic Acid (PFOS)	4.19		ng/l	2.07	0.581	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.07	0.643	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.07	0.302	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.07	0.260	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.07	0.440	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.07	0.400	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.07	0.577	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.71	J	ng/l	2.07	0.387	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.07	0.614	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.07	0.326	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.07	1.02	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	85		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	83		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	68		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	74		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	91		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	220		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	113		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	191	Q	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	120		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	90		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	46		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	115		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	75		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	107		33-143

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03 D

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM

Extraction Date: 01/17/19 19:06

Analytical Date: 01/23/19 12:55

Analyst: CB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	290		ug/l	1.0	0.49	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/19/19 10:26
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	74		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 14:22
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0326	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 22:41
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.10		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-04

Date Collected: 01/16/19 12:45

Client ID: GWFB02_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	94		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
Client ID: GWFB02_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 00:15
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.94	0.363	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.94	0.451	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.94	0.370	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.94	0.478	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.94	0.362	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.94	0.424	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.94	0.447	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.08		ng/l	1.94	0.189	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.94	0.506	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.94	0.424	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.94	0.545	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.94	0.603	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.94	0.283	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.428	J	ng/l	1.94	0.244	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.94	0.412	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.94	0.375	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.94	0.541	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.650	J	ng/l	1.94	0.363	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.94	0.576	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.94	0.305	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.94	0.961	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
Client ID: GWFB02_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	100		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	95		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	99		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	74		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	107		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	105		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	72		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	102		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	109		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	22		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	94		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	112		33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/18/19 09:39
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02-04 Batch: WG1198434-1					
1,4-Dioxane	ND		ug/l	0.150	0.0339

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	33		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 01/19/19 20:56
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 02-04 Batch: WG1198461-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.373
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.464
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.380
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.492
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.372
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.436
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.460
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.28	J	ng/l	2.00	0.194
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.520
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.436
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.560
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.620
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.291
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.250
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.424
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.386
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.556
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.373
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.592
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.314
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.988

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 122,537(M)
Analytical Date: 01/19/19 20:56
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 02-04 Batch: WG1198461-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	115		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	123		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	124		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	100		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	110		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	111		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	117		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	108		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	113		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	136		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	118		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	112		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	134		33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/21/19 13:27
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198691-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/21/19 13:27
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198691-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/21/19 13:27
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198691-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	53		10-120
4-Terphenyl-d14	69		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/20/19 17:23
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1198692-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 17:23
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1198692-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	85		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 02-04 Batch: WG1198434-2 WG1198434-3								
1,4-Dioxane	110		115		40-140	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	27		23		15-110



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 02-04 Batch: WG1198461-2 WG1198461-3								
Perfluorobutanoic Acid (PFBA)	84		93		67-148	10		30
Perfluoropentanoic Acid (PFPeA)	88		96		63-161	9		30
Perfluorobutanesulfonic Acid (PFBS)	82		90		65-157	9		30
Perfluorohexanoic Acid (PFHxA)	90		98		69-168	9		30
Perfluoroheptanoic Acid (PFHpA)	78		84		58-159	7		30
Perfluorohexanesulfonic Acid (PFHxS)	84		92		69-177	9		30
Perfluorooctanoic Acid (PFOA)	82		88		63-159	7		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	102		101		49-187	1		30
Perfluoroheptanesulfonic Acid (PFHpS)	77		95		61-179	21		30
Perfluorononanoic Acid (PFNA)	84		90		68-171	7		30
Perfluorooctanesulfonic Acid (PFOS)	68		76		52-151	11		30
Perfluorodecanoic Acid (PFDA)	86		96		63-171	11		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	90		100		56-173	11		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	78		82		60-166	5		30
Perfluoroundecanoic Acid (PFUnA)	76		82		60-153	8		30
Perfluorodecanesulfonic Acid (PFDS)	88		89		38-156	1		30
Perfluorooctanesulfonamide (FOSA)	79		90		46-170	13		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	80		84		45-170	5		30
Perfluorododecanoic Acid (PFDoA)	78		86		67-153	10		30
Perfluorotridecanoic Acid (PFTrDA)	95		115		48-158	19		30
Perfluorotetradecanoic Acid (PFTA)	94		98		59-182	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 02-04 Batch: WG1198461-2 WG1198461-3								

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		108		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		114		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	107		110		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		90		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		97		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	105		111		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		103		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		112		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	123		114		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	107		101		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	106		96		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	97		96		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	95		78		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	124		111		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	36		44		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	93		80		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	106		88		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	153	Q	154	Q	33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198691-2 WG1198691-3								
Acenaphthene	76		87		37-111	13		30
1,2,4-Trichlorobenzene	76		85		39-98	11		30
Hexachlorobenzene	82		94		40-140	14		30
Bis(2-chloroethyl)ether	73		86		40-140	16		30
2-Chloronaphthalene	87		99		40-140	13		30
1,2-Dichlorobenzene	73		85		40-140	15		30
1,3-Dichlorobenzene	71		80		40-140	12		30
1,4-Dichlorobenzene	69		83		36-97	18		30
3,3'-Dichlorobenzidine	44		59		40-140	29		30
2,4-Dinitrotoluene	82		90		48-143	9		30
2,6-Dinitrotoluene	92		101		40-140	9		30
Fluoranthene	78		87		40-140	11		30
4-Chlorophenyl phenyl ether	81		90		40-140	11		30
4-Bromophenyl phenyl ether	85		94		40-140	10		30
Bis(2-chloroisopropyl)ether	73		82		40-140	12		30
Bis(2-chloroethoxy)methane	77		88		40-140	13		30
Hexachlorobutadiene	81		95		40-140	16		30
Hexachlorocyclopentadiene	76		90		40-140	17		30
Hexachloroethane	73		84		40-140	14		30
Isophorone	86		98		40-140	13		30
Naphthalene	78		90		40-140	14		30
Nitrobenzene	82		93		40-140	13		30
NDPA/DPA	74		88		40-140	17		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198691-2 WG1198691-3								
n-Nitrosodi-n-propylamine	89		100		29-132	12		30
Bis(2-ethylhexyl)phthalate	88		94		40-140	7		30
Butyl benzyl phthalate	93		104		40-140	11		30
Di-n-butylphthalate	82		90		40-140	9		30
Di-n-octylphthalate	91		98		40-140	7		30
Diethyl phthalate	90		98		40-140	9		30
Dimethyl phthalate	94		104		40-140	10		30
Benzo(a)anthracene	84		93		40-140	10		30
Benzo(a)pyrene	80		91		40-140	13		30
Benzo(b)fluoranthene	85		96		40-140	12		30
Benzo(k)fluoranthene	81		92		40-140	13		30
Chrysene	79		84		40-140	6		30
Acenaphthylene	86		96		45-123	11		30
Anthracene	80		88		40-140	10		30
Benzo(ghi)perylene	85		90		40-140	6		30
Fluorene	80		92		40-140	14		30
Phenanthrene	79		85		40-140	7		30
Dibenzo(a,h)anthracene	84		92		40-140	9		30
Indeno(1,2,3-cd)pyrene	78		83		40-140	6		30
Pyrene	74		83		26-127	11		30
Biphenyl	81		92		40-140	13		30
4-Chloroaniline	45		66		40-140	38	Q	30
2-Nitroaniline	96		102		52-143	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198691-2 WG1198691-3								
3-Nitroaniline	62		78		25-145	23		30
4-Nitroaniline	72		83		51-143	14		30
Dibenzofuran	77		87		40-140	12		30
2-Methylnaphthalene	81		94		40-140	15		30
1,2,4,5-Tetrachlorobenzene	81		93		2-134	14		30
Acetophenone	84		94		39-129	11		30
2,4,6-Trichlorophenol	89		103		30-130	15		30
p-Chloro-m-cresol	90		105	Q	23-97	15		30
2-Chlorophenol	79		95		27-123	18		30
2,4-Dichlorophenol	87		97		30-130	11		30
2,4-Dimethylphenol	10	Q	29	Q	30-130	97	Q	30
2-Nitrophenol	90		104		30-130	14		30
4-Nitrophenol	87	Q	101	Q	10-80	15		30
2,4-Dinitrophenol	90		78		20-130	14		30
4,6-Dinitro-o-cresol	88		92		20-164	4		30
Pentachlorophenol	83		75		9-103	10		30
Phenol	64		74		12-110	14		30
2-Methylphenol	61		78		30-130	24		30
3-Methylphenol/4-Methylphenol	76		93		30-130	20		30
2,4,5-Trichlorophenol	93		106		30-130	13		30
Benzoic Acid	80		63		10-164	24		30
Benzyl Alcohol	90		100		26-116	11		30
Carbazole	82		90		55-144	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198691-2 WG1198691-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	72		86		21-120
Phenol-d6	63		75		10-120
Nitrobenzene-d5	83		94		23-120
2-Fluorobiphenyl	87		96		15-120
2,4,6-Tribromophenol	87		101		10-120
4-Terphenyl-d14	71		80		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1198692-2 WG1198692-3								
Acenaphthene	68		80		40-140	16		40
2-Chloronaphthalene	81		96		40-140	17		40
Fluoranthene	77		95		40-140	21		40
Hexachlorobutadiene	75		86		40-140	14		40
Naphthalene	74		85		40-140	14		40
Benzo(a)anthracene	72		90		40-140	22		40
Benzo(a)pyrene	74		92		40-140	22		40
Benzo(b)fluoranthene	63		78		40-140	21		40
Benzo(k)fluoranthene	69		85		40-140	21		40
Chrysene	71		87		40-140	20		40
Acenaphthylene	83		100		40-140	19		40
Anthracene	73		90		40-140	21		40
Benzo(ghi)perylene	67		85		40-140	24		40
Fluorene	71		86		40-140	19		40
Phenanthrene	72		88		40-140	20		40
Dibenzo(a,h)anthracene	67		85		40-140	24		40
Indeno(1,2,3-cd)pyrene	80		100		40-140	22		40
Pyrene	78		96		40-140	21		40
2-Methylnaphthalene	80		93		40-140	15		40
Pentachlorophenol	58		71		40-140	20		40
Hexachlorobenzene	73		89		40-140	20		40
Hexachloroethane	62		71		40-140	14		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1198692-2 WG1198692-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	58		67		21-120
Phenol-d6	46		55		10-120
Nitrobenzene-d5	78		91		23-120
2-Fluorobiphenyl	84		98		15-120
2,4,6-Tribromophenol	75		93		10-120
4-Terphenyl-d14	81		98		41-149

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
Client ID: RMW01_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/21/19 16:25
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 10:26
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	105		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
Client ID: RMW07_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/21/19 16:39
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 10:26
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
Client ID: RMW09_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/21/19 16:52
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 10:26
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	96		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
Client ID: GWFB02_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/21/19 17:06
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 10:26
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	85		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 01/21/19 00:41
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198386-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	82		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198386-2 WG1198386-3									
Aroclor 1016	75		66		40-140	13		50	A
Aroclor 1260	79		71		40-140	11		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		76		30-150	A
Decachlorobiphenyl	100		83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		80		30-150	B
Decachlorobiphenyl	99		90		30-150	B



PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
Client ID: RMW01_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 01/19/19 13:38
Analyst: KEG

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 10:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-01

Date Collected: 01/16/19 10:00

Client ID: RMW01_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	42		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 22:20
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	73		30-150	A
DCAA	65		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/19/19 13:51
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 10:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02

Date Collected: 01/16/19 12:00

Client ID: RMW07_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	57		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 22:39
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/19/19 14:03
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 10:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	46		30-150	B
Decachlorobiphenyl	50		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 22:58
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/19/19 14:16
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 10:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 23:17
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	108		30-150	A
DCAA	85		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/17/19 12:54
Analyst: SL

Extraction Method: EPA 3510C
Extraction Date: 01/16/19 20:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198332-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 01/17/19 12:54
 Analyst: SL

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 20:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198332-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	91		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
Analytical Date: 01/19/19 21:24
Analyst: DGM

Extraction Method: EPA 8151A
Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1199049-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	90		30-150	A
DCAA	75		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198332-2 WG1198332-3									
Delta-BHC	84		82		30-150	3		20	A
Lindane	84		83		30-150	2		20	A
Alpha-BHC	86		86		30-150	0		20	A
Beta-BHC	79		76		30-150	4		20	A
Heptachlor	82		82		30-150	0		20	A
Aldrin	80		80		30-150	0		20	A
Heptachlor epoxide	87		84		30-150	3		20	A
Endrin	88		86		30-150	2		20	A
Endrin aldehyde	71		70		30-150	2		20	A
Endrin ketone	91		90		30-150	1		20	A
Dieldrin	95		94		30-150	1		20	A
4,4'-DDE	87		85		30-150	2		20	A
4,4'-DDD	86		83		30-150	3		20	A
4,4'-DDT	90		87		30-150	3		20	A
Endosulfan I	81		80		30-150	2		20	A
Endosulfan II	82		82		30-150	1		20	A
Endosulfan sulfate	80		78		30-150	2		20	A
Methoxychlor	107		103		30-150	4		20	A
cis-Chlordane	77		76		30-150	2		20	A
trans-Chlordane	82		80		30-150	3		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198332-2 WG1198332-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	68		68		30-150	A
Decachlorobiphenyl	92		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		76		30-150	B
Decachlorobiphenyl	95		79		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1199049-2 WG1199049-3									
2,4-D	92		86		30-150	7		25	A
2,4,5-T	95		91		30-150	4		25	A
2,4,5-TP (Silvex)	88		86		30-150	2		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	94		96		30-150	A
DCAA	95		85		30-150	B

METALS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.154		mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Antimony, Total	0.00055	J	mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00049	J	mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Barium, Total	0.3830		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Calcium, Total	481.		mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Chromium, Total	0.00090	J	mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00023	J	mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Copper, Total	0.00202		mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Iron, Total	1.56		mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Lead, Total	0.00396		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Magnesium, Total	62.4		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Manganese, Total	0.5704		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 13:26	EPA 7470A	1,7470A	MG
Nickel, Total	0.00216		mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Potassium, Total	25.7		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Sodium, Total	523.		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/18/19 12:24	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00439	J	mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00100	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00035	J	mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.3570		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Calcium, Dissolved	457.		mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00031	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Iron, Dissolved	1.04		mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	60.4		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.5404		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:57	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00131	J	mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Potassium, Dissolved	24.5		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Sodium, Dissolved	517.		mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.294		mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Antimony, Total	0.00200	J	mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00165		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Barium, Total	0.1446		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00019	J	mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Calcium, Total	147.		mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Chromium, Total	0.00139		mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00086		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Copper, Total	0.01151		mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Iron, Total	0.656		mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Lead, Total	0.03003		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Magnesium, Total	35.8		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Manganese, Total	0.1382		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 13:28	EPA 7470A	1,7470A	MG
Nickel, Total	0.00364		mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Potassium, Total	13.2		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Selenium, Total	0.00888		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Sodium, Total	39.8		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00316	J	mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Zinc, Total	0.05297		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/18/19 12:28	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00215	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00125		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1205		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	0.00017	J	mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Calcium, Dissolved	141.		mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00042	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00048	J	mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00422		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0484	J	mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00206		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	34.7		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.1232		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:59	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00241		mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Potassium, Dissolved	12.6		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00808		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Sodium, Dissolved	39.0		mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.00224	J	mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.03694		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.192		mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Antimony, Total	0.00071	J	mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01185		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Barium, Total	0.1033		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Calcium, Total	162.		mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Chromium, Total	0.00083	J	mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00097		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Copper, Total	0.00082	J	mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Iron, Total	32.0		mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Lead, Total	0.00653		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Magnesium, Total	43.1		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Manganese, Total	2.410		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 13:30	EPA 7470A	1,7470A	MG
Nickel, Total	0.00123	J	mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Potassium, Total	14.8		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Sodium, Total	77.9		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/18/19 13:20	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00474	J	mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00085	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.01152		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1024		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Calcium, Dissolved	161.		mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00042	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00060		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Iron, Dissolved	31.8		mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00266		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	42.8		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Manganese, Dissolved	2.390		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 18:00	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00083	J	mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Potassium, Dissolved	14.4		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Sodium, Dissolved	79.8		mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00390	J	mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Barium, Total	0.00092		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Calcium, Total	0.0405	J	mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Chromium, Total	0.00068	J	mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Iron, Total	0.0220	J	mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Manganese, Total	0.00185		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 13:31	EPA 7470A	1,7470A	MG
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/18/19 12:59	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00047	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.00062		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Calcium, Dissolved	0.0811	J	mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00018	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0315	J	mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 18:02	EPA 7470A	1,7470A	MG
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198536-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Antimony, Dissolved	0.00054	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Chromium, Dissolved	0.00037	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Iron, Dissolved	0.0411	J	mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Sodium, Dissolved	0.0323	J	mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Thallium, Dissolved	0.00015	J	mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198546-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 12:56	1,7470A	MG



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198566-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Antimony, Total	0.00052	J	mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Iron, Total	0.0360	J	mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198576-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:38	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198536-2								
Aluminum, Dissolved	100		-		80-120	-		
Antimony, Dissolved	84		-		80-120	-		
Arsenic, Dissolved	102		-		80-120	-		
Barium, Dissolved	97		-		80-120	-		
Beryllium, Dissolved	107		-		80-120	-		
Cadmium, Dissolved	104		-		80-120	-		
Calcium, Dissolved	100		-		80-120	-		
Chromium, Dissolved	94		-		80-120	-		
Cobalt, Dissolved	98		-		80-120	-		
Copper, Dissolved	94		-		80-120	-		
Iron, Dissolved	103		-		80-120	-		
Lead, Dissolved	91		-		80-120	-		
Magnesium, Dissolved	104		-		80-120	-		
Manganese, Dissolved	96		-		80-120	-		
Nickel, Dissolved	95		-		80-120	-		
Potassium, Dissolved	100		-		80-120	-		
Selenium, Dissolved	104		-		80-120	-		
Silver, Dissolved	100		-		80-120	-		
Sodium, Dissolved	102		-		80-120	-		
Thallium, Dissolved	92		-		80-120	-		
Vanadium, Dissolved	99		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198536-2					
Zinc, Dissolved	104	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198546-2					
Mercury, Total	114	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198566-2					
Aluminum, Total	100	-	80-120	-	
Antimony, Total	92	-	80-120	-	
Arsenic, Total	104	-	80-120	-	
Barium, Total	102	-	80-120	-	
Beryllium, Total	107	-	80-120	-	
Cadmium, Total	108	-	80-120	-	
Calcium, Total	100	-	80-120	-	
Chromium, Total	100	-	80-120	-	
Cobalt, Total	102	-	80-120	-	
Copper, Total	101	-	80-120	-	
Iron, Total	116	-	80-120	-	
Lead, Total	96	-	80-120	-	
Magnesium, Total	107	-	80-120	-	
Manganese, Total	100	-	80-120	-	
Nickel, Total	99	-	80-120	-	
Potassium, Total	102	-	80-120	-	
Selenium, Total	108	-	80-120	-	
Silver, Total	102	-	80-120	-	
Sodium, Total	104	-	80-120	-	
Thallium, Total	98	-	80-120	-	
Vanadium, Total	101	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198566-2					
Zinc, Total	108	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198576-2					
Mercury, Dissolved	109	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198536-3 QC Sample: L1902070-01 Client ID: RMW01_011619												
Aluminum, Dissolved	0.00439J	2	1.99	100		-	-		75-125	-		20
Antimony, Dissolved	0.00100J	0.5	0.5031	101		-	-		75-125	-		20
Arsenic, Dissolved	0.00035J	0.12	0.1238	103		-	-		75-125	-		20
Barium, Dissolved	0.3570	2	2.341	99		-	-		75-125	-		20
Beryllium, Dissolved	ND	0.05	0.05226	104		-	-		75-125	-		20
Cadmium, Dissolved	ND	0.051	0.05075	100		-	-		75-125	-		20
Calcium, Dissolved	457.	10	481	240	Q	-	-		75-125	-		20
Chromium, Dissolved	0.00031J	0.2	0.1932	97		-	-		75-125	-		20
Cobalt, Dissolved	ND	0.5	0.4764	95		-	-		75-125	-		20
Copper, Dissolved	ND	0.25	0.2351	94		-	-		75-125	-		20
Iron, Dissolved	1.04	1	2.10	106		-	-		75-125	-		20
Lead, Dissolved	ND	0.51	0.4975	98		-	-		75-125	-		20
Magnesium, Dissolved	60.4	10	73.8	134	Q	-	-		75-125	-		20
Manganese, Dissolved	0.5404	0.5	1.032	98		-	-		75-125	-		20
Nickel, Dissolved	0.00131J	0.5	0.4744	95		-	-		75-125	-		20
Potassium, Dissolved	24.5	10	35.0	105		-	-		75-125	-		20
Selenium, Dissolved	ND	0.12	0.0421J	35	Q	-	-		75-125	-		20
Silver, Dissolved	ND	0.05	0.04810	96		-	-		75-125	-		20
Sodium, Dissolved	517.	10	544	270	Q	-	-		75-125	-		20
Thallium, Dissolved	ND	0.12	0.1172	98		-	-		75-125	-		20
Vanadium, Dissolved	ND	0.5	0.4981	100		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198536-3 QC Sample: L1902070-01 Client ID: RMW01_011619									
Zinc, Dissolved	ND	0.5	0.4699	94	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198546-3 WG1198546-4 QC Sample: L1901909-01 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00455	91	0.00458	92	75-125	1	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198566-3 QC Sample: L1901815-01 Client ID: MS Sample									
Aluminum, Total	0.027	2	2.08	103	-	-	75-125	-	20
Antimony, Total	0.0008J	0.5	0.5507	110	-	-	75-125	-	20
Arsenic, Total	0.01448	0.12	0.1400	105	-	-	75-125	-	20
Barium, Total	0.8693	2	2.806	97	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05195	104	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.05052	99	-	-	75-125	-	20
Calcium, Total	146	10	154	80	-	-	75-125	-	20
Chromium, Total	0.00181	0.2	0.1996	99	-	-	75-125	-	20
Cobalt, Total	0.0038	0.5	0.4971	99	-	-	75-125	-	20
Copper, Total	0.00097J	0.25	0.2464	98	-	-	75-125	-	20
Iron, Total	13.8	1	15.1	130	Q	-	75-125	-	20
Lead, Total	ND	0.51	0.5057	99	-	-	75-125	-	20
Magnesium, Total	158	10	178	200	Q	-	75-125	-	20
Manganese, Total	1.721	0.5	2.218	99	-	-	75-125	-	20
Nickel, Total	0.00352	0.5	0.4884	97	-	-	75-125	-	20
Potassium, Total	84.5	10	93.1	86	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.124	103	-	-	75-125	-	20
Silver, Total	ND	0.05	0.05051	101	-	-	75-125	-	20
Sodium, Total	163	10	176	130	Q	-	75-125	-	20
Thallium, Total	ND	0.12	0.1210	101	-	-	75-125	-	20
Vanadium, Total	0.0017J	0.5	0.5100	102	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198566-3 QC Sample: L1901815-01 Client ID: MS Sample									
Zinc, Total	0.0044J	0.5	0.5042	101	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198576-3 WG1198576-4 QC Sample: L1901865-02 Client ID: MS Sample									
Mercury, Dissolved	ND	0.005	0.00416	83	0.00279	56	Q 75-125	39	Q 20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198536-4 QC Sample: L1902070-01 Client ID: RMW01_011619						
Aluminum, Dissolved	0.00439J	0.00497J	mg/l	NC		20
Antimony, Dissolved	0.00100J	0.00265J	mg/l	NC		20
Arsenic, Dissolved	0.00035J	0.00043J	mg/l	NC		20
Barium, Dissolved	0.3570	0.3697	mg/l	3		20
Beryllium, Dissolved	ND	ND	mg/l	NC		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Calcium, Dissolved	457.	489	mg/l	7		20
Chromium, Dissolved	0.00031J	0.00032J	mg/l	NC		20
Cobalt, Dissolved	ND	ND	mg/l	NC		20
Copper, Dissolved	ND	ND	mg/l	NC		20
Iron, Dissolved	1.04	1.16	mg/l	11		20
Lead, Dissolved	ND	ND	mg/l	NC		20
Magnesium, Dissolved	60.4	63.6	mg/l	5		20
Manganese, Dissolved	0.5404	0.5704	mg/l	5		20
Nickel, Dissolved	0.00131J	0.00183J	mg/l	NC		20
Potassium, Dissolved	24.5	26.2	mg/l	7		20
Selenium, Dissolved	ND	ND	mg/l	NC		20
Silver, Dissolved	ND	ND	mg/l	NC		20
Sodium, Dissolved	517.	543	mg/l	5		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198536-4 QC Sample: L1902070-01 Client ID: RMW01_011619					
Thallium, Dissolved	ND	0.00018J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198566-4 QC Sample: L1901815-01 Client ID: DUP Sample					
Arsenic, Total	0.01448	0.01557	mg/l	7	20
Barium, Total	0.8693	0.9003	mg/l	4	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Chromium, Total	0.00181	0.00158	mg/l	14	20
Copper, Total	0.00097J	0.00103	mg/l	NC	20
Lead, Total	ND	ND	mg/l	NC	20
Nickel, Total	0.00352	0.00271	mg/l	26	20
Silver, Total	ND	0.00032J	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.016		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:56	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:37	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02

Date Collected: 01/16/19 12:00

Client ID: RMW07_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:57	1,9010C/9012B	LH
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:39	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.009		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:58	1,9010C/9012B	LH
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:39	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-04

Date Collected: 01/16/19 12:45

Client ID: GWFB02_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:59	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:40	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1198387-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:36	1,7196A	GD
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1198578-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:29	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1198387-2								
Chromium, Hexavalent	97		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1198578-2 WG1198578-3								
Cyanide, Total	91		98		85-115	7		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198387-4 QC Sample: L1902070-01 Client ID: RMW01_011619												
Chromium, Hexavalent	ND	0.1	0.100	100	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198578-4 WG1198578-5 QC Sample: L1901865-02 Client ID: MS Sample												
Cyanide, Total	0.037	0.2	0.225	94	0.227	0.227	95	1	80-120	1	1	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198387-3 QC Sample: L1902070-01 Client ID: RMW01_011619						
Chromium, Hexavalent	ND	ND	mg/l	NC		20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-01A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-01B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-01C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-01D	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902070-01E	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902070-01F	Plastic 500ml unpreserved	A	7	7	2.6	Y	Absent		HEXCR-7196(1)
L1902070-01G	Plastic 250ml NaOH preserved	A	>12	>12	2.6	Y	Absent		TCN-9010(14)
L1902070-01H	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8082-LVI(7)
L1902070-01I	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8082-LVI(7)
L1902070-01J	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1902070-01K	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1902070-01L	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-01M	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Serial_No:01251915:23
Lab Number: L1902070
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-01N	Amber 1000ml unpreserved	A	7	7	2.6	Y	Absent		HERB-APA(7)
L1902070-01O	Amber 1000ml unpreserved	A	7	7	2.6	Y	Absent		HERB-APA(7)
L1902070-02A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-02B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-02C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-02D	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902070-02E	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902070-02F	Plastic 500ml unpreserved	A	7	7	2.6	Y	Absent		HEXCR-7196(1)
L1902070-02G	Plastic 250ml NaOH preserved	A	>12	>12	2.6	Y	Absent		TCN-9010(14)
L1902070-02H	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8082-LVI(7)
L1902070-02I	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8082-LVI(7)
L1902070-02J	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1902070-02K	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1902070-02L	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-02M	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-02N	Amber 1000ml unpreserved	A	7	7	2.6	Y	Absent		HERB-APA(7)
L1902070-02O	Amber 1000ml unpreserved	A	7	7	2.6	Y	Absent		HERB-APA(7)
L1902070-02P	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-02Q	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-02R	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Serial_No:01251915:23
Lab Number: L1902070
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-02S	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)
L1902070-03A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-03B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-03C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-03D	Plastic 250ml HNO3 preserved	C	<2	<2	3.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902070-03E	Plastic 250ml HNO3 preserved	C	<2	<2	3.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902070-03F	Plastic 500ml unpreserved	C	7	7	3.3	Y	Absent		HEXCR-7196(1)
L1902070-03G	Plastic 250ml NaOH preserved	C	>12	>12	3.3	Y	Absent		TCN-9010(14)
L1902070-03H	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(7)
L1902070-03I	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(7)
L1902070-03J	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L1902070-03K	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L1902070-03L	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-03M	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-03N	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L1902070-03O	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L1902070-03P	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-03Q	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-03R	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)
L1902070-03S	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Serial_No:01251915:23
Lab Number: L1902070
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-04A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-04B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-04C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-04D	Plastic 250ml HNO3 preserved	C	<2	<2	3.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902070-04E	Plastic 250ml HNO3 preserved	C	<2	<2	3.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902070-04F	Plastic 500ml unpreserved	C	7	7	3.3	Y	Absent		HEXCR-7196(1)
L1902070-04G	Plastic 250ml NaOH preserved	C	>12	>12	3.3	Y	Absent		TCN-9010(14)
L1902070-04H	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(7)
L1902070-04I	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(7)
L1902070-04J	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L1902070-04K	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L1902070-04L	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-04M	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-04N	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L1902070-04O	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L1902070-04P	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-04Q	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-04R	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)
L1902070-04S	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)
L1902070-05A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Serial_No:01251915:23

Lab Number: L1902070

Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-05B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab 1/16/19	ALPHA Job # L1902070										
		Project Information	Deliverables	Billing Information											
Client Information Client: <u>Langin Engineering</u> Address: <u>21 Penn Plaza</u> <u>8th Fl, NY NY 10001-2727</u> Phone: <u>212-479-5400</u> Fax: <u>212-479-5444</u> Email: <u>jleung@kngin.com</u>		Project Name: <u>Gerard Ave + E. 146th St</u> Project Location: <u>Bronx NY</u> Project # <u>170487003</u> (Use Project name as Project #) <input checked="" type="checkbox"/>		<input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQULS (1 File) <input checked="" type="checkbox"/> EQULS (4 File) <input type="checkbox"/> Other											
Project Manager: <u>Julia Leung</u> ALPHAQuote #: <u>7013</u>		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:											
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)											
These samples have been previously analyzed by Alpha <input type="checkbox"/>		Other project specific requirements/comments: <u>Please also cc: datamanagement@kngin.com and vzluaga@kngin.com</u>		Please specify Metals or TAL.											
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOC	Part 315/TCL SVOCs	Part 305/TCL PCBs	Pesticides /Herbicides	TAL Metals (total + residual)	Hex Chromium	total cyanide	PFOS + PFOA + 4-Dioxane	Sample Specific Comments	Total Bottles
		Date	Time												
<u>02070-01</u>	<u>RMW01_011619</u>	<u>1/16/19</u>	<u>1000</u>	<u>GW</u>	<u>JS</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>dissolved metals</u>	
<u>02</u>	<u>RMW07_011619</u>	<u>↓</u>	<u>1200</u>	<u>↓</u>	<u>JS</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>filtered in</u>	
<u>03</u>	<u>RMW09_011619</u>	<u>↓</u>	<u>1500</u>	<u>↓</u>	<u>JS</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>field</u>	
<u>04</u>	<u>GWFB02_011619</u>	<u>↓</u>	<u>1245</u>	<u>AQ</u>	<u>JS</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		
<u>05</u>	<u>GWTB03_011619</u>	<u>-</u>	<u>-</u>	<u>AQ</u>	<u>JS</u>	<u>X</u>									
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)					
		Relinquished By: <u>[Signature]</u>		Date/Time: <u>1/16/19 - 4:20pm</u>		Received By: <u>[Signature]</u>		Date/Time: <u>1/16/19 1600</u>							
		Relinquished By: <u>[Signature]</u>		Date/Time: <u>1/16/19 1841</u>		Received By: <u>[Signature]</u>		Date/Time: <u>1/16/19 1900</u>							
		Relinquished By: <u>[Signature]</u>		Date/Time: <u>1/16/19</u>		Received By: <u>[Signature]</u>		Date/Time: <u>1/16/19 2300</u>							



ANALYTICAL REPORT

Lab Number:	L1902340
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/25/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1902340-01	RMW10_011719	WATER	BRONX, NY	01/17/19 15:35	01/17/19
L1902340-02	RMW11_011719	WATER	BRONX, NY	01/17/19 13:45	01/17/19
L1902340-03	RMW14_011719	WATER	BRONX, NY	01/17/19 12:00	01/17/19
L1902340-04	RMW16_011719	WATER	BRONX, NY	01/17/19 13:15	01/17/19
L1902340-05	RMW17_011719	WATER	BRONX, NY	01/17/19 09:40	01/17/19
L1902340-06	GWTB04_011719	WATER	BRONX, NY	01/17/19 00:00	01/17/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

L1902340-02 and -03: The sample was received above the appropriate pH for the Dissolved Metals analysis.

The laboratory added HNO₃ to a pH <2.

L1902340-04: The collection date and time on the chain of custody was 17-JAN-19 13:15; however, the collection date/time on the container label was 17-JAN-19 13:10. At the client's request, the collection date/time is reported as 17-JAN-19 13:15.

Volatile Organics

L1902340-01, -02 and -03: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 01/25/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01 D
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 17:04
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	ND		ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
1,3-Dichloropropene, Total	ND		ug/l	1.0	0.29	2
1,1-Dichloropropene	ND		ug/l	5.0	1.4	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	71		ug/l	1.0	0.32	2
Toluene	2.3	J	ug/l	5.0	1.4	2
Ethylbenzene	2.0	J	ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	ND		ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01 D
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,3-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	4.4	J	ug/l	5.0	1.4	2
o-Xylene	3.0	J	ug/l	5.0	1.4	2
Xylenes, Total	7.4	J	ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
1,2-Dichloroethene, Total	ND		ug/l	5.0	1.4	2
Dibromomethane	ND		ug/l	10	2.0	2
1,2,3-Trichloropropane	ND		ug/l	5.0	1.4	2
Acrylonitrile	ND		ug/l	10	3.0	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	3.5	J	ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		ug/l	10	3.9	2
Vinyl acetate	ND		ug/l	10	2.0	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
2,2-Dichloropropane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,3-Dichloropropane	ND		ug/l	5.0	1.4	2
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	1.4	2
Bromobenzene	ND		ug/l	5.0	1.4	2
n-Butylbenzene	9.4		ug/l	5.0	1.4	2
sec-Butylbenzene	13		ug/l	5.0	1.4	2
tert-Butylbenzene	1.6	J	ug/l	5.0	1.4	2
o-Chlorotoluene	ND		ug/l	5.0	1.4	2
p-Chlorotoluene	ND		ug/l	5.0	1.4	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Hexachlorobutadiene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	72		ug/l	5.0	1.4	2
p-Isopropyltoluene	ND		ug/l	5.0	1.4	2
Naphthalene	ND		ug/l	5.0	1.4	2

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01 D
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	100		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	ND		ug/l	5.0	1.4	2
1,4-Dioxane	ND		ug/l	500	120	2
p-Diethylbenzene	21		ug/l	4.0	1.4	2
p-Ethyltoluene	ND		ug/l	4.0	1.4	2
1,2,4,5-Tetramethylbenzene	110		ug/l	4.0	1.1	2
Ethyl ether	ND		ug/l	5.0	1.4	2
trans-1,4-Dichloro-2-butene	ND		ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	91		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02 D
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 17:25
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
1,3-Dichloropropene, Total	ND		ug/l	5.0	1.4	10
1,1-Dichloropropene	ND		ug/l	25	7.0	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	120		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02 D

Date Collected: 01/17/19 13:45

Client ID: RMW11_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10
1,3-Dichlorobenzene	ND		ug/l	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
Xylenes, Total	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	ND		ug/l	25	7.0	10
1,2-Dichloroethene, Total	ND		ug/l	25	7.0	10
Dibromomethane	ND		ug/l	50	10.	10
1,2,3-Trichloropropane	ND		ug/l	25	7.0	10
Acrylonitrile	77		ug/l	50	15.	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	34	J	ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
Vinyl acetate	ND		ug/l	50	10.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
2,2-Dichloropropane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,3-Dichloropropane	ND		ug/l	25	7.0	10
1,1,1,2-Tetrachloroethane	ND		ug/l	25	7.0	10
Bromobenzene	ND		ug/l	25	7.0	10
n-Butylbenzene	18	J	ug/l	25	7.0	10
sec-Butylbenzene	12	J	ug/l	25	7.0	10
tert-Butylbenzene	ND		ug/l	25	7.0	10
o-Chlorotoluene	ND		ug/l	25	7.0	10
p-Chlorotoluene	ND		ug/l	25	7.0	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Hexachlorobutadiene	ND		ug/l	25	7.0	10
Isopropylbenzene	140		ug/l	25	7.0	10
p-Isopropyltoluene	ND		ug/l	25	7.0	10
Naphthalene	360		ug/l	25	7.0	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02 D
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	260		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
1,3,5-Trimethylbenzene	ND		ug/l	25	7.0	10
1,2,4-Trimethylbenzene	13	J	ug/l	25	7.0	10
1,4-Dioxane	ND		ug/l	2500	610	10
p-Diethylbenzene	47		ug/l	20	7.0	10
p-Ethyltoluene	18	J	ug/l	20	7.0	10
1,2,4,5-Tetramethylbenzene	95		ug/l	20	5.4	10
Ethyl ether	ND		ug/l	25	7.0	10
trans-1,4-Dichloro-2-butene	ND		ug/l	25	7.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	91		70-130

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03 D

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 01/22/19 17:47

Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	50	14.	20
1,1-Dichloroethane	ND		ug/l	50	14.	20
Chloroform	ND		ug/l	50	14.	20
Carbon tetrachloride	ND		ug/l	10	2.7	20
1,2-Dichloropropane	ND		ug/l	20	2.7	20
Dibromochloromethane	ND		ug/l	10	3.0	20
1,1,2-Trichloroethane	ND		ug/l	30	10.	20
Tetrachloroethene	ND		ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	ND		ug/l	10	2.6	20
1,1,1-Trichloroethane	ND		ug/l	50	14.	20
Bromodichloromethane	ND		ug/l	10	3.8	20
trans-1,3-Dichloropropene	ND		ug/l	10	3.3	20
cis-1,3-Dichloropropene	ND		ug/l	10	2.9	20
1,3-Dichloropropene, Total	ND		ug/l	10	2.9	20
1,1-Dichloropropene	ND		ug/l	50	14.	20
Bromoform	ND		ug/l	40	13.	20
1,1,1,2-Tetrachloroethane	ND		ug/l	10	3.3	20
Benzene	20		ug/l	10	3.2	20
Toluene	ND		ug/l	50	14.	20
Ethylbenzene	200		ug/l	50	14.	20
Chloromethane	ND		ug/l	50	14.	20
Bromomethane	ND		ug/l	50	14.	20
Vinyl chloride	ND		ug/l	20	1.4	20
Chloroethane	ND		ug/l	50	14.	20
1,1-Dichloroethene	ND		ug/l	10	3.4	20
trans-1,2-Dichloroethene	ND		ug/l	50	14.	20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03 D

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20
1,3-Dichlorobenzene	ND		ug/l	50	14.	20
1,4-Dichlorobenzene	ND		ug/l	50	14.	20
Methyl tert butyl ether	ND		ug/l	50	14.	20
p/m-Xylene	32	J	ug/l	50	14.	20
o-Xylene	ND		ug/l	50	14.	20
Xylenes, Total	32	J	ug/l	50	14.	20
cis-1,2-Dichloroethene	ND		ug/l	50	14.	20
1,2-Dichloroethene, Total	ND		ug/l	50	14.	20
Dibromomethane	ND		ug/l	100	20.	20
1,2,3-Trichloropropane	ND		ug/l	50	14.	20
Acrylonitrile	ND		ug/l	100	30.	20
Styrene	ND		ug/l	50	14.	20
Dichlorodifluoromethane	ND		ug/l	100	20.	20
Acetone	38	J	ug/l	100	29.	20
Carbon disulfide	ND		ug/l	100	20.	20
2-Butanone	ND		ug/l	100	39.	20
Vinyl acetate	ND		ug/l	100	20.	20
4-Methyl-2-pentanone	ND		ug/l	100	20.	20
2-Hexanone	ND		ug/l	100	20.	20
Bromochloromethane	ND		ug/l	50	14.	20
2,2-Dichloropropane	ND		ug/l	50	14.	20
1,2-Dibromoethane	ND		ug/l	40	13.	20
1,3-Dichloropropane	ND		ug/l	50	14.	20
1,1,1,2-Tetrachloroethane	ND		ug/l	50	14.	20
Bromobenzene	ND		ug/l	50	14.	20
n-Butylbenzene	40	J	ug/l	50	14.	20
sec-Butylbenzene	16	J	ug/l	50	14.	20
tert-Butylbenzene	ND		ug/l	50	14.	20
o-Chlorotoluene	ND		ug/l	50	14.	20
p-Chlorotoluene	ND		ug/l	50	14.	20
1,2-Dibromo-3-chloropropane	ND		ug/l	50	14.	20
Hexachlorobutadiene	ND		ug/l	50	14.	20
Isopropylbenzene	180		ug/l	50	14.	20
p-Isopropyltoluene	ND		ug/l	50	14.	20
Naphthalene	280		ug/l	50	14.	20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03 D
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	380		ug/l	50	14.	20
1,2,3-Trichlorobenzene	ND		ug/l	50	14.	20
1,2,4-Trichlorobenzene	ND		ug/l	50	14.	20
1,3,5-Trimethylbenzene	210		ug/l	50	14.	20
1,2,4-Trimethylbenzene	ND		ug/l	50	14.	20
1,4-Dioxane	ND		ug/l	5000	1200	20
p-Diethylbenzene	42		ug/l	40	14.	20
p-Ethyltoluene	30	J	ug/l	40	14.	20
1,2,4,5-Tetramethylbenzene	120		ug/l	40	11.	20
Ethyl ether	ND		ug/l	50	14.	20
trans-1,4-Dichloro-2-butene	ND		ug/l	50	14.	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 16:20
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	109		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 16:42
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	107		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-06
 Client ID: GWTB04_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 00:00
 Date Received: 01/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 15:58
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-06
 Client ID: GWTB04_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 00:00
 Date Received: 01/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.7	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-06
 Client ID: GWTB04_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 00:00
 Date Received: 01/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	107		70-130

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/22/19 10:51
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1199942-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/22/19 10:51
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1199942-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/22/19 10:51
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1199942-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1199942-3 WG1199942-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	99		96		70-130	3		20
Chloroform	98		96		70-130	2		20
Carbon tetrachloride	83		78		63-132	6		20
1,2-Dichloropropane	100		90		70-130	11		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	93		87		70-130	7		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	85		81		62-150	5		20
1,2-Dichloroethane	90		88		70-130	2		20
1,1,1-Trichloroethane	84		83		67-130	1		20
Bromodichloromethane	94		95		67-130	1		20
trans-1,3-Dichloropropene	85		86		70-130	1		20
cis-1,3-Dichloropropene	88		88		70-130	0		20
1,1-Dichloropropene	86		86		70-130	0		20
Bromoform	100		100		54-136	0		20
1,1,1,2,2-Tetrachloroethane	100		97		67-130	3		20
Benzene	100		98		70-130	2		20
Toluene	100		100		70-130	0		20
Ethylbenzene	97		95		70-130	2		20
Chloromethane	99		94		64-130	5		20
Bromomethane	96		91		39-139	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1199942-3 WG1199942-4								
Vinyl chloride	100		98		55-140	2		20
Chloroethane	120		110		55-138	9		20
1,1-Dichloroethene	96		93		61-145	3		20
trans-1,2-Dichloroethene	99		99		70-130	0		20
Trichloroethene	97		92		70-130	5		20
1,2-Dichlorobenzene	100		99		70-130	1		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	82		81		63-130	1		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		98		70-130	2		20
Dibromomethane	94		96		70-130	2		20
1,2,3-Trichloropropane	99		98		64-130	1		20
Acrylonitrile	98		96		70-130	2		20
Styrene	105		100		70-130	5		20
Dichlorodifluoromethane	87		82		36-147	6		20
Acetone	79		76		58-148	4		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	82		79		63-138	4		20
Vinyl acetate	100		100		70-130	0		20
4-Methyl-2-pentanone	80		80		59-130	0		20
2-Hexanone	66		68		57-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1199942-3 WG1199942-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	73		69		63-133	6		20
1,2-Dibromoethane	97		98		70-130	1		20
1,3-Dichloropropane	98		100		70-130	2		20
1,1,1,2-Tetrachloroethane	98		97		64-130	1		20
Bromobenzene	100		91		70-130	9		20
n-Butylbenzene	92		88		53-136	4		20
sec-Butylbenzene	92		88		70-130	4		20
tert-Butylbenzene	79		75		70-130	5		20
o-Chlorotoluene	100		94		70-130	6		20
p-Chlorotoluene	99		94		70-130	5		20
1,2-Dibromo-3-chloropropane	79		80		41-144	1		20
Hexachlorobutadiene	86		80		63-130	7		20
Isopropylbenzene	92		83		70-130	10		20
p-Isopropyltoluene	90		86		70-130	5		20
Naphthalene	76		75		70-130	1		20
n-Propylbenzene	96		90		69-130	6		20
1,2,3-Trichlorobenzene	86		84		70-130	2		20
1,2,4-Trichlorobenzene	85		82		70-130	4		20
1,3,5-Trimethylbenzene	98		93		64-130	5		20
1,2,4-Trimethylbenzene	96		92		70-130	4		20
1,4-Dioxane	112		104		56-162	7		20
p-Diethylbenzene	79		82		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1199942-3 WG1199942-4								
p-Ethyltoluene	96		91		70-130	5		20
1,2,4,5-Tetramethylbenzene	71		60	Q	70-130	17		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	80		82		70-130	2		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	86		87		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	89		87		70-130
Dibromofluoromethane	95		95		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 12:59
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	1.2	J	ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	57		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 13:20
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.1		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.61		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	4.1		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	0.06	J	ug/l	0.10	0.01	1
Acenaphthylene	0.06	J	ug/l	0.10	0.01	1
Anthracene	0.24		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	0.70		ug/l	0.10	0.01	1
Phenanthrene	0.88		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.49		ug/l	0.10	0.02	1
2-Methylnaphthalene	1.0		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-01

Date Collected: 01/17/19 15:35

Client ID: RMW10_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	73		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 15:18
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	58		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 13:47
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.19		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.08	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	140	E	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.06	J	ug/l	0.10	0.01	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.23		ug/l	0.10	0.01	1
Phenanthrene	0.25		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.10		ug/l	0.10	0.02	1
2-Methylnaphthalene	54		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	73		41-149

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02 D

Date Collected: 01/17/19 13:45

Client ID: RMW11_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM

Extraction Date: 01/19/19 08:58

Analytical Date: 01/24/19 21:05

Analyst: CB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	220		ug/l	1.0	0.49	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 15:47
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	1.7	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	50		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 14:39
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.41		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	1.0		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	120	E	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.28		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.28		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.33		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.13		ug/l	0.10	0.01	1
Chrysene	0.28		ug/l	0.10	0.01	1
Acenaphthylene	0.10	J	ug/l	0.10	0.01	1
Anthracene	0.32		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.20		ug/l	0.10	0.01	1
Fluorene	0.55		ug/l	0.10	0.01	1
Phenanthrene	1.4		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.03	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.20		ug/l	0.10	0.01	1
Pyrene	0.97		ug/l	0.10	0.02	1
2-Methylnaphthalene	65		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	72		10-120
4-Terphenyl-d14	63		41-149

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03 D

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM

Extraction Date: 01/19/19 08:58

Analytical Date: 01/24/19 21:28

Analyst: CB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Naphthalene	210		ug/l	1.0	0.49	10
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Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 16:15
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
Client ID: RMW16_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	53		10-120
4-Terphenyl-d14	44		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 15:05
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.11		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.22		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.07	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.06	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.05	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.08	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Pyrene	0.12		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.04	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-04

Date Collected: 01/17/19 13:15

Client ID: RMW16_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	57		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 16:43
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
Client ID: RMW17_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	1.8	J	ug/l	5.0	0.57	1
2-Methylphenol	1.8	J	ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	1.3	J	ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	59		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 15:32
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.22		ug/l	0.10	0.01	1
2-Chloronaphthalene	0.07	J	ug/l	0.20	0.02	1
Fluoranthene	0.37		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.42		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.17		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.14		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.14		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Chrysene	0.18		ug/l	0.10	0.01	1
Acenaphthylene	0.18		ug/l	0.10	0.01	1
Anthracene	0.16		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.07	J	ug/l	0.10	0.01	1
Fluorene	0.14		ug/l	0.10	0.01	1
Phenanthrene	0.68		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.06	J	ug/l	0.10	0.01	1
Pyrene	0.52		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.17		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-05

Date Collected: 01/17/19 09:40

Client ID: RMW17_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	74		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/21/19 11:35
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1199171-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/21/19 11:35
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1199171-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/21/19 11:35
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1199171-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	45		10-120
4-Terphenyl-d14	57		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/22/19 11:35
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1199172-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/22/19 11:35
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1199172-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	31		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	41		10-120
4-Terphenyl-d14	74		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1199171-2 WG1199171-3								
Acenaphthene	81		82		37-111	1		30
1,2,4-Trichlorobenzene	80		78		39-98	3		30
Hexachlorobenzene	88		93		40-140	6		30
Bis(2-chloroethyl)ether	77		76		40-140	1		30
2-Chloronaphthalene	91		91		40-140	0		30
1,2-Dichlorobenzene	79		76		40-140	4		30
1,3-Dichlorobenzene	78		72		40-140	8		30
1,4-Dichlorobenzene	76		72		36-97	5		30
3,3'-Dichlorobenzidine	54		58		40-140	7		30
2,4-Dinitrotoluene	82		90		48-143	9		30
2,6-Dinitrotoluene	95		102		40-140	7		30
Fluoranthene	88		94		40-140	7		30
4-Chlorophenyl phenyl ether	85		91		40-140	7		30
4-Bromophenyl phenyl ether	89		97		40-140	9		30
Bis(2-chloroisopropyl)ether	76		75		40-140	1		30
Bis(2-chloroethoxy)methane	83		81		40-140	2		30
Hexachlorobutadiene	88		83		40-140	6		30
Hexachlorocyclopentadiene	91		85		40-140	7		30
Hexachloroethane	77		74		40-140	4		30
Isophorone	90		89		40-140	1		30
Naphthalene	83		82		40-140	1		30
Nitrobenzene	86		82		40-140	5		30
NDPA/DPA	88		94		40-140	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1199171-2 WG1199171-3								
n-Nitrosodi-n-propylamine	94		90		29-132	4		30
Bis(2-ethylhexyl)phthalate	101		101		40-140	0		30
Butyl benzyl phthalate	99		107		40-140	8		30
Di-n-butylphthalate	92		94		40-140	2		30
Di-n-octylphthalate	103		103		40-140	0		30
Diethyl phthalate	93		98		40-140	5		30
Dimethyl phthalate	101		103		40-140	2		30
Benzo(a)anthracene	100		104		40-140	4		30
Benzo(a)pyrene	96		102		40-140	6		30
Benzo(b)fluoranthene	99		98		40-140	1		30
Benzo(k)fluoranthene	100		105		40-140	5		30
Chrysene	93		97		40-140	4		30
Acenaphthylene	93		93		45-123	0		30
Anthracene	94		97		40-140	3		30
Benzo(ghi)perylene	92		103		40-140	11		30
Fluorene	86		87		40-140	1		30
Phenanthrene	90		92		40-140	2		30
Dibenzo(a,h)anthracene	94		103		40-140	9		30
Indeno(1,2,3-cd)pyrene	86		93		40-140	8		30
Pyrene	86		90		26-127	5		30
Biphenyl	86		86		40-140	0		30
4-Chloroaniline	95		94		40-140	1		30
2-Nitroaniline	94		98		52-143	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1199171-2 WG1199171-3								
3-Nitroaniline	60		63		25-145	5		30
4-Nitroaniline	73		84		51-143	14		30
Dibenzofuran	81		85		40-140	5		30
2-Methylnaphthalene	90		86		40-140	5		30
1,2,4,5-Tetrachlorobenzene	86		84		2-134	2		30
Acetophenone	85		83		39-129	2		30
2,4,6-Trichlorophenol	100		108		30-130	8		30
p-Chloro-m-cresol	101	Q	108	Q	23-97	7		30
2-Chlorophenol	85		84		27-123	1		30
2,4-Dichlorophenol	93		95		30-130	2		30
2,4-Dimethylphenol	98		99		30-130	1		30
2-Nitrophenol	90		90		30-130	0		30
4-Nitrophenol	84	Q	86	Q	10-80	2		30
2,4-Dinitrophenol	86		92		20-130	7		30
4,6-Dinitro-o-cresol	88		92		20-164	4		30
Pentachlorophenol	81		90		9-103	11		30
Phenol	68		65		12-110	5		30
2-Methylphenol	92		92		30-130	0		30
3-Methylphenol/4-Methylphenol	93		91		30-130	2		30
2,4,5-Trichlorophenol	99		104		30-130	5		30
Benzoic Acid	62		72		10-164	15		30
Benzyl Alcohol	89		87		26-116	2		30
Carbazole	95		100		55-144	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1199171-2 WG1199171-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	79		75		21-120
Phenol-d6	65		59		10-120
Nitrobenzene-d5	86		82		23-120
2-Fluorobiphenyl	89		89		15-120
2,4,6-Tribromophenol	96		103		10-120
4-Terphenyl-d14	76		82		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1199172-2 WG1199172-3								
Acenaphthene	62		57		40-140	8		40
2-Chloronaphthalene	76		71		40-140	7		40
Fluoranthene	76		76		40-140	0		40
Hexachlorobutadiene	70		64		40-140	9		40
Naphthalene	69		63		40-140	9		40
Benzo(a)anthracene	72		72		40-140	0		40
Benzo(a)pyrene	65		64		40-140	2		40
Benzo(b)fluoranthene	62		62		40-140	0		40
Benzo(k)fluoranthene	69		68		40-140	1		40
Chrysene	71		70		40-140	1		40
Acenaphthylene	79		74		40-140	7		40
Anthracene	72		69		40-140	4		40
Benzo(ghi)perylene	70		68		40-140	3		40
Fluorene	65		61		40-140	6		40
Phenanthrene	71		68		40-140	4		40
Dibenzo(a,h)anthracene	71		70		40-140	1		40
Indeno(1,2,3-cd)pyrene	84		83		40-140	1		40
Pyrene	76		76		40-140	0		40
2-Methylnaphthalene	76		71		40-140	7		40
Pentachlorophenol	55		58		40-140	5		40
Hexachlorobenzene	73		70		40-140	4		40
Hexachloroethane	58		54		40-140	7		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1199172-2 WG1199172-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	44		39		21-120
Phenol-d6	36		33		10-120
Nitrobenzene-d5	70		65		23-120
2-Fluorobiphenyl	75		70		15-120
2,4,6-Tribromophenol	57		63		10-120
4-Terphenyl-d14	75		75		41-149

PCBS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 01/23/19 05:15
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 15:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/22/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	104		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
Client ID: RMW11_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/23/19 07:59
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 15:40
Cleanup Method: EPA 3665A
Cleanup Date: 01/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
Client ID: RMW14_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/23/19 08:12
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 15:40
Cleanup Method: EPA 3665A
Cleanup Date: 01/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	99		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
Client ID: RMW16_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/23/19 08:26
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 15:40
Cleanup Method: EPA 3665A
Cleanup Date: 01/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	101		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 01/23/19 08:39
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 15:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/22/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/22/19 01:20
 Analyst: AWS

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 15:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/21/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/21/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-05 Batch: WG1199538-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	85		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1199538-2 WG1199538-3									
Aroclor 1016	74		78		40-140	6		50	A
Aroclor 1260	71		77		40-140	8		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		89		30-150	A
Decachlorobiphenyl	78		88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		89		30-150	B
Decachlorobiphenyl	88		95		30-150	B



PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/22/19 14:44
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-01

Date Collected: 01/17/19 15:35

Client ID: RMW10_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 17:04
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	75		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/22/19 14:56
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02

Date Collected: 01/17/19 13:45

Client ID: RMW11_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	41		30-150	B
Decachlorobiphenyl	46		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 17:23
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	76		30-150	A
DCAA	76		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
Client ID: RMW14_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 01/22/19 15:09
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		30-150	B
Decachlorobiphenyl	34		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 18:01
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	117		30-150	A
DCAA	91		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/22/19 15:22
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	0.005	J	ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	71		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 18:20
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	95		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
Client ID: RMW17_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 01/22/19 15:35
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	0.007	J	ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 18:39
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	84		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/21/19 16:08
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1199145-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	89		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/22/19 10:52
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1199589-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/22/19 10:52
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1199589-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	90		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1199145-2 WG1199145-3									
2,4-D	87		84		30-150	4		25	A
2,4,5-T	95		94		30-150	1		25	A
2,4,5-TP (Silvex)	86		85		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria	Column
DCAA	89		88		30-150	A
DCAA	83		98		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1199589-2 WG1199589-3									
Delta-BHC	83		87		30-150	5		20	A
Lindane	81		85		30-150	4		20	A
Alpha-BHC	85		90		30-150	5		20	A
Beta-BHC	91		97		30-150	6		20	A
Heptachlor	79		87		30-150	10		20	A
Aldrin	75		85		30-150	12		20	A
Heptachlor epoxide	91		95		30-150	5		20	A
Endrin	87		91		30-150	5		20	A
Endrin aldehyde	77		78		30-150	0		20	A
Endrin ketone	91		95		30-150	4		20	A
Dieldrin	91		96		30-150	5		20	A
4,4'-DDE	83		90		30-150	8		20	A
4,4'-DDD	85		91		30-150	7		20	A
4,4'-DDT	88		89		30-150	2		20	A
Endosulfan I	84		85		30-150	1		20	A
Endosulfan II	83		88		30-150	6		20	A
Endosulfan sulfate	86		89		30-150	3		20	A
Methoxychlor	96		99		30-150	4		20	A
cis-Chlordane	76		81		30-150	7		20	A
trans-Chlordane	75		82		30-150	9		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1199589-2 WG1199589-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	78		84		30-150	A
Decachlorobiphenyl	74		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		90		30-150	B
Decachlorobiphenyl	79		89		30-150	B

METALS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.162		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00171		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Barium, Total	0.1480		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Calcium, Total	121.		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Chromium, Total	0.00923		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00042	J	mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Copper, Total	0.00131		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Iron, Total	8.53		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Lead, Total	0.02811		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Magnesium, Total	26.4		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Manganese, Total	0.1990		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 16:53	EPA 7470A	1,7470A	MG
Nickel, Total	0.00463		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Potassium, Total	12.9		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Sodium, Total	47.1		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Zinc, Total	0.00426	J	mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/22/19 14:54	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00361	J	mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00052	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00175		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1481		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Calcium, Dissolved	126.		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00046	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00025	J	mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Iron, Dissolved	8.00		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00049	J	mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	27.7		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.1942		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:24	EPA 7470A	1,7470A	MG
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Potassium, Dissolved	13.1		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Sodium, Dissolved	50.1		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.464		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00723		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Barium, Total	0.02871		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Calcium, Total	40.4		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Chromium, Total	0.00609		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00049	J	mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Copper, Total	0.00148		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Iron, Total	3.70		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Lead, Total	0.00269		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Magnesium, Total	6.22		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Manganese, Total	0.6418		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 16:54	EPA 7470A	1,7470A	MG
Nickel, Total	0.00374		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Potassium, Total	4.11		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Sodium, Total	26.9		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/22/19 14:58	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00488	J	mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00055	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00746		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.02474		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Calcium, Dissolved	43.2		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00019	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00017	J	mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Iron, Dissolved	2.95		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	6.40		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.6393		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:29	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00083	J	mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Potassium, Dissolved	4.36		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Sodium, Dissolved	28.0		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.95		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01701		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Barium, Total	0.05478		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00014	J	mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Calcium, Total	120.		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Chromium, Total	0.02835		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00189		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Copper, Total	0.00668		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Iron, Total	14.1		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Lead, Total	0.02247		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Magnesium, Total	23.7		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Manganese, Total	1.003		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 16:56	EPA 7470A	1,7470A	MG
Nickel, Total	0.01411		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Potassium, Total	9.14		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Sodium, Total	67.0		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00563		mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Zinc, Total	0.02173		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	0.024	J	mg/l	0.010	0.010	1		01/22/19 15:02	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0143		mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00047	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.01584		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.04556		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Calcium, Dissolved	124.		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00089	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00025	J	mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Iron, Dissolved	10.9		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00683		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	24.3		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.9499		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:31	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00102	J	mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Potassium, Dissolved	9.13		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Sodium, Dissolved	69.7		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.54		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Antimony, Total	0.00126	J	mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00244		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Barium, Total	0.1418		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Calcium, Total	267.		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Chromium, Total	0.01498		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00192		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Copper, Total	0.01261		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Iron, Total	4.10		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Lead, Total	0.05401		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Magnesium, Total	57.2		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Manganese, Total	0.3968		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Mercury, Total	0.00018	J	mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 17:01	EPA 7470A	1,7470A	MG
Nickel, Total	0.01051		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Potassium, Total	17.2		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Selenium, Total	0.00292	J	mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Sodium, Total	76.6		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00442	J	mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Zinc, Total	0.02406		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/22/19 15:06	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00139	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00114		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1260		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Calcium, Dissolved	263.		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00033	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00099		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00092	J	mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Iron, Dissolved	1.15		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00101		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	57.2		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.3540		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:32	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00239		mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Potassium, Dissolved	16.5		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00219	J	mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Sodium, Dissolved	76.5		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01140		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.608		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00273		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Barium, Total	0.1084		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Calcium, Total	212.		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Chromium, Total	0.00711		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00101		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Copper, Total	0.00501		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Iron, Total	1.92		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Lead, Total	0.01982		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Magnesium, Total	62.2		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Manganese, Total	0.2988		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 17:03	EPA 7470A	1,7470A	MG
Nickel, Total	0.00546		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Potassium, Total	19.8		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Sodium, Total	60.0		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00445	J	mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Zinc, Total	0.01551		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/22/19 15:10	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00370	J	mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00194		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1037		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Calcium, Dissolved	202.		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00046	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00048	J	mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.558		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	60.9		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.2636		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:49	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00254		mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Potassium, Dissolved	18.5		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Sodium, Dissolved	57.2		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.00249	J	mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00609	J	mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1198915-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Antimony, Dissolved	0.00059	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Iron, Dissolved	0.0260	J	mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Sodium, Dissolved	0.0319	J	mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1198950-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Antimony, Total	0.00048	J	mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Iron, Total	0.0250	J	mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1199010-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 16:14	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1199430-1										
Mercury, Dissolved	0.00008	J	mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:20	1,7470A	MG



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1198915-2								
Aluminum, Dissolved	100		-		80-120	-		
Antimony, Dissolved	101		-		80-120	-		
Arsenic, Dissolved	104		-		80-120	-		
Barium, Dissolved	107		-		80-120	-		
Beryllium, Dissolved	109		-		80-120	-		
Cadmium, Dissolved	115		-		80-120	-		
Calcium, Dissolved	106		-		80-120	-		
Chromium, Dissolved	104		-		80-120	-		
Cobalt, Dissolved	106		-		80-120	-		
Copper, Dissolved	104		-		80-120	-		
Iron, Dissolved	116		-		80-120	-		
Lead, Dissolved	109		-		80-120	-		
Magnesium, Dissolved	110		-		80-120	-		
Manganese, Dissolved	101		-		80-120	-		
Nickel, Dissolved	107		-		80-120	-		
Potassium, Dissolved	106		-		80-120	-		
Selenium, Dissolved	106		-		80-120	-		
Silver, Dissolved	108		-		80-120	-		
Sodium, Dissolved	104		-		80-120	-		
Thallium, Dissolved	107		-		80-120	-		
Vanadium, Dissolved	104		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1198915-2					
Zinc, Dissolved	110	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1198950-2					
Aluminum, Total	104	-	80-120	-	
Antimony, Total	103	-	80-120	-	
Arsenic, Total	103	-	80-120	-	
Barium, Total	107	-	80-120	-	
Beryllium, Total	107	-	80-120	-	
Cadmium, Total	114	-	80-120	-	
Calcium, Total	101	-	80-120	-	
Chromium, Total	99	-	80-120	-	
Cobalt, Total	103	-	80-120	-	
Copper, Total	100	-	80-120	-	
Iron, Total	112	-	80-120	-	
Lead, Total	111	-	80-120	-	
Magnesium, Total	107	-	80-120	-	
Manganese, Total	100	-	80-120	-	
Nickel, Total	104	-	80-120	-	
Potassium, Total	101	-	80-120	-	
Selenium, Total	111	-	80-120	-	
Silver, Total	105	-	80-120	-	
Sodium, Total	104	-	80-120	-	
Thallium, Total	105	-	80-120	-	
Vanadium, Total	103	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1198950-2					
Zinc, Total	115	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1199010-2					
Mercury, Total	110	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1199430-2					
Mercury, Dissolved	114	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198915-3 QC Sample: L1902346-01 Client ID: MS Sample												
Aluminum, Dissolved	0.009J	2	1.92	96	-	-	-	-	75-125	-	-	20
Antimony, Dissolved	0.0006J	0.5	0.5548	111	-	-	-	-	75-125	-	-	20
Arsenic, Dissolved	0.00054	0.12	0.1234	102	-	-	-	-	75-125	-	-	20
Barium, Dissolved	0.1596	2	2.181	101	-	-	-	-	75-125	-	-	20
Beryllium, Dissolved	ND	0.05	0.05312	106	-	-	-	-	75-125	-	-	20
Cadmium, Dissolved	ND	0.051	0.05473	107	-	-	-	-	75-125	-	-	20
Calcium, Dissolved	44.4	10	54.6	102	-	-	-	-	75-125	-	-	20
Chromium, Dissolved	0.00041J	0.2	0.1993	100	-	-	-	-	75-125	-	-	20
Cobalt, Dissolved	0.0004J	0.5	0.5116	102	-	-	-	-	75-125	-	-	20
Copper, Dissolved	ND	0.25	0.2522	101	-	-	-	-	75-125	-	-	20
Iron, Dissolved	31.0	1	32.2	120	-	-	-	-	75-125	-	-	20
Lead, Dissolved	ND	0.51	0.5227	102	-	-	-	-	75-125	-	-	20
Magnesium, Dissolved	12.9	10	23.6	107	-	-	-	-	75-125	-	-	20
Manganese, Dissolved	1.540	0.5	1.985	89	-	-	-	-	75-125	-	-	20
Nickel, Dissolved	ND	0.5	0.5174	103	-	-	-	-	75-125	-	-	20
Potassium, Dissolved	12.4	10	22.2	98	-	-	-	-	75-125	-	-	20
Selenium, Dissolved	ND	0.12	0.118	98	-	-	-	-	75-125	-	-	20
Silver, Dissolved	ND	0.05	0.05155	103	-	-	-	-	75-125	-	-	20
Sodium, Dissolved	62.8	10	70.8	80	-	-	-	-	75-125	-	-	20
Thallium, Dissolved	ND	0.12	0.1222	102	-	-	-	-	75-125	-	-	20
Vanadium, Dissolved	0.0018J	0.5	0.5128	102	-	-	-	-	75-125	-	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198915-3 QC Sample: L1902346-01 Client ID: MS Sample									
Zinc, Dissolved	ND	0.5	0.5250	105	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198950-3 QC Sample: L1902215-01 Client ID: MS Sample									
Aluminum, Total	ND	2	1.99	100	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.5783	116	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.1325	110	-	-	75-125	-	20
Barium, Total	0.0103	2	2.065	103	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05218	104	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.05296	104	-	-	75-125	-	20
Calcium, Total	842.	10	826	0	Q	-	75-125	-	20
Chromium, Total	ND	0.2	0.1919	96	-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.4832	97	-	-	75-125	-	20
Copper, Total	ND	0.25	0.2420	97	-	-	75-125	-	20
Iron, Total	0.714	1	1.77	106	-	-	75-125	-	20
Lead, Total	ND	0.51	0.5481	107	-	-	75-125	-	20
Magnesium, Total	388.	10	382	0	Q	-	75-125	-	20
Manganese, Total	0.7297	0.5	1.191	92	-	-	75-125	-	20
Nickel, Total	ND	0.5	0.4890	98	-	-	75-125	-	20
Potassium, Total	28.8	10	38.5	97	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.126	105	-	-	75-125	-	20
Silver, Total	ND	0.05	0.05009	100	-	-	75-125	-	20
Sodium, Total	2410	10	2360	0	Q	-	75-125	-	20
Thallium, Total	ND	0.12	0.1163	97	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.5274	105	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198950-3 QC Sample: L1902215-01 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.4786	96	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1199010-3 WG1199010-4 QC Sample: L1901984-05 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00477	96	0.00475	95	75-125	1	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1199430-3 QC Sample: L1902340-01 Client ID: RMW10_011719									
Mercury, Dissolved	ND	0.005	0.00454	91	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198915-4 QC Sample: L1902346-01 Client ID: DUP Sample						
Arsenic, Dissolved	0.00054	0.00058	mg/l	6		20
Barium, Dissolved	0.1596	0.1611	mg/l	1		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Chromium, Dissolved	0.00041J	0.00049J	mg/l	NC		20
Copper, Dissolved	ND	ND	mg/l	NC		20
Lead, Dissolved	ND	ND	mg/l	NC		20
Manganese, Dissolved	1.540	1.555	mg/l	1		20
Selenium, Dissolved	ND	ND	mg/l	NC		20
Silver, Dissolved	ND	ND	mg/l	NC		20
Zinc, Dissolved	ND	ND	mg/l	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198950-4 QC Sample: L1902215-01 Client ID: DUP Sample					
Aluminum, Total	ND	ND	mg/l	NC	20
Arsenic, Total	ND	ND	mg/l	NC	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	842.	839	mg/l	0	20
Chromium, Total	ND	ND	mg/l	NC	20
Cobalt, Total	ND	ND	mg/l	NC	20
Copper, Total	ND	0.01642	mg/l	NC	20
Iron, Total	0.714	0.697	mg/l	2	20
Lead, Total	ND	ND	mg/l	NC	20
Magnesium, Total	388.	386	mg/l	1	20
Manganese, Total	0.7297	0.7428	mg/l	2	20
Nickel, Total	ND	ND	mg/l	NC	20
Potassium, Total	28.8	28.8	mg/l	0	20
Sodium, Total	2410	2400	mg/l	0	20
Zinc, Total	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1199430-4 QC Sample: L1902340-01 Client ID: RMW10_011719					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.006		mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 14:15	1,9010C/9012B	LH
Chromium, Hexavalent	0.006	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:11	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02

Date Collected: 01/17/19 13:45

Client ID: RMW11_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 13:29	1,9010C/9012B	LH
Chromium, Hexavalent	0.004	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:11	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.004	J	mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 13:30	1,9010C/9012B	LH
Chromium, Hexavalent	0.004	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:13	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-04

Date Collected: 01/17/19 13:15

Client ID: RMW16_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.009		mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 14:16	1,9010C/9012B	LH
Chromium, Hexavalent	0.008	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:13	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-05

Date Collected: 01/17/19 09:40

Client ID: RMW17_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.003	J	mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 13:32	1,9010C/9012B	LH
Chromium, Hexavalent	0.005	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:14	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1198765-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:10	1,7196A	GD
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1199045-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 13:01	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1198765-2								
Chromium, Hexavalent	103		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1199045-2 WG1199045-3								
Cyanide, Total	100		95		85-115	5		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198765-4 QC Sample: L1902340-01 Client ID: RMW10_011719												
Chromium, Hexavalent	0.006J	0.1	0.101	101	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1199045-4 WG1199045-5 QC Sample: L1902340-01 Client ID: RMW10_011719												
Cyanide, Total	0.006	0.2	0.195	94	0.189	0.189	91	-	80-120	3	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198765-3 QC Sample: L1902340-01 Client ID: RMW10_011719						
Chromium, Hexavalent	0.006J	0.004J	mg/l	NC		20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-01A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-01B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-01C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-01D	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-01E	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902340-01F	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1902340-01G	Plastic 500ml unpreserved	A	7	7	2.3	Y	Absent		HEXCR-7196(1)
L1902340-01H	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1902340-01I	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1902340-01J	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1902340-01K	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1902340-01L	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-LVI(7)
L1902340-01M	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-LVI(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01251913:55
Lab Number: L1902340
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-01N	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1902340-01O	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1902340-02A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-02B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-02C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-02D	Plastic 60ml HNO3 preserved	B	7	<2	3.6	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-02D1	Plastic 60ml HNO3 preserved	B	7	<2	3.6	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-02D2	Plastic 60ml HNO3 preserved	B	7	<2	3.6	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-02D3	Plastic 60ml HNO3 preserved	B	7	<2	3.6	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01251913:55
Lab Number: L1902340
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-02E	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902340-02F	Plastic 250ml NaOH preserved	B	>12	>12	3.6	Y	Absent		TCN-9010(14)
L1902340-02G	Plastic 500ml unpreserved	B	7	7	3.6	Y	Absent		HEXCR-7196(1)
L1902340-02H	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1902340-02I	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1902340-02J	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1902340-02K	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1902340-02L	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-LVI(7)
L1902340-02M	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-LVI(7)
L1902340-02N	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1902340-02O	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1902340-03A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-03B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-03C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-03D	Plastic 250ml HNO3 preserved	C	7	<2	2.9	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-03E	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-03F	Plastic 250ml NaOH preserved	C	>12	>12	2.9	Y	Absent		TCN-9010(14)
L1902340-03G	Plastic 500ml unpreserved	C	7	7	2.9	Y	Absent		HEXCR-7196(1)
L1902340-03H	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-LVI(7)
L1902340-03I	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-LVI(7)
L1902340-03J	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1902340-03K	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1902340-03L	Amber 250ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270-LVI(7)
L1902340-03M	Amber 250ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270-LVI(7)
L1902340-03N	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1902340-03O	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1902340-04A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-04B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-04C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-04D	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-04E	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902340-04F	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1902340-04G	Plastic 500ml unpreserved	A	7	7	2.3	Y	Absent		HEXCR-7196(1)
L1902340-04H	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1902340-04I	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1902340-04J	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01251913:55
Lab Number: L1902340
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-04K	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1902340-04L	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-LVI(7)
L1902340-04M	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-LVI(7)
L1902340-04N	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1902340-04O	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1902340-05A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-05B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-05C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-05D	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-05E	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902340-05F	Plastic 250ml NaOH preserved	C	>12	>12	2.9	Y	Absent		TCN-9010(14)
L1902340-05G	Plastic 500ml unpreserved	C	7	7	2.9	Y	Absent		HEXCR-7196(1)
L1902340-05H	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-LVI(7)
L1902340-05I	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-LVI(7)
L1902340-05J	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1902340-05K	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1902340-05L	Amber 250ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270-LVI(7)
L1902340-05M	Amber 250ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270-LVI(7)
L1902340-05N	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1902340-05O	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Serial_No:01251913:55

Lab Number: L1902340

Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-06A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-06B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page _____ of _____		Date Rec'd in Lab <u>1/18/19</u>		ALPHA Job # <u>4902340</u>																	
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: <u>Gerard Ave. + E. 146th St.</u> Project Location: <u>Bronx NY</u> Project # <u>170487001</u> (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input checked="" type="checkbox"/> ASP-A <u>1/17/19</u> <input type="checkbox"/> EQiS (1 File) <input checked="" type="checkbox"/> EQiS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #																	
Client Information Client: <u>Langan Engineering</u> Address: <u>21 Penn Plaza, 360 W. 31st St</u> <u>8th Fl., NY, NY 10001-2727</u> Phone: <u>(212) 479-5400</u> Fax: <u>(212) 479-5444</u> Email: <u>jleung@langan.com</u>		Project Manager: <u>Julia Leung</u> ALPHAQuote #: _____ Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																			
These samples have been previously analyzed by Alpha <input type="checkbox"/>						ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)																	
Other project specific requirements/comments: Please also cc: <u>datamanagement@langan.com</u> and <u>vzuluaga@langan.com</u> Please specify Metals or TAL.						<table border="1"> <tr> <th>Part 375/TCL VOCs</th> <th>Part 375/TCL SVOCs</th> <th>Part 375/TCL PCBs</th> <th>Pesticides</th> <th>Herbicides</th> <th>TAL Metals (total & dissolved)</th> <th>Hexavalent Chromium</th> <th>Total Cyanide</th> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> </table>		Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals (total & dissolved)	Hexavalent Chromium	Total Cyanide	X	X	X	X	X	X	X	X	Total Bottles	
Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals (total & dissolved)	Hexavalent Chromium	Total Cyanide																		
X	X	X	X	X	X	X	X																		
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix		Sampler's Initials		Sample Specific Comments															
<u>02340-01</u>		<u>RMW10_011719</u>		<u>1/17/19 1535</u>		<u>GW</u>		<u>JL</u>																	
<u>-02</u>		<u>RMW11_011719</u>		<u>1345</u>						Please preserve dissolved metals at lab															
<u>-03</u>		<u>RMW14_011719</u>		<u>1200</u>						please preserve dissolved metals at lab															
<u>-04</u>		<u>RMW16_011719</u>		<u>1315</u>																					
<u>-05</u>		<u>RMW17_011719</u>		<u>0940</u>						All dissolved metals field filtered															
<u>-06</u>		<u>GWTB04_011719</u>				<u>AG</u>																			
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)															
Relinquished By: <u>[Signature]</u>		Date/Time: <u>1/17/19 - 4:00</u>		Received By: <u>[Signature]</u>		Date/Time: <u>1/17/19 16:00</u>																			
Relinquished By: <u>Paul Mayella</u>		Date/Time: <u>1/18/19 00:30</u>		Received By: <u>[Signature]</u>		Date/Time: <u>1/18/19 00:30</u>																			



ANALYTICAL REPORT

Lab Number:	L1930730
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	404 EXTERIOR STREET
Project Number:	170487001
Report Date:	07/27/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1930730-01	RMW25_071219	WATER	BRONX, NY	07/12/19 10:35	07/12/19
L1930730-02	RMW23_071219	WATER	BRONX, NY	07/12/19 13:10	07/12/19
L1930730-03	GWTB05_071219	WATER	BRONX, NY	07/12/19 00:00	07/12/19
L1930730-04	GWFB_071219	WATER	BRONX, NY	07/12/19 13:00	07/12/19
L1930730-05	GWDUP_071219	WATER	BRONX, NY	07/12/19 00:00	07/12/19

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Case Narrative (continued)

Report Submission

July 27, 2019: This final report includes the results of all requested analyses.

July 16, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1930730-04: The Field Blank has a result for acetone present above the reporting limit. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

Perfluorinated Alkyl Acids by Isotope Dilution

L1930730-05: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

Total Metals

The WG1259915-1 Method Blank, associated with L1930730-01, -02, -04, and -05, has a concentration above the reporting limit for manganese. Since the sample was non-detect to the RL or had results greater than 10x the blank concentration for this analyte, no further actions were taken. The results of the original analysis are reported.

The WG1259915-3 MS recovery, performed on L1930730-01, is outside the acceptance criteria for aluminum (159%). A post digestion spike was performed and yielded an unacceptable recovery of 146%. The serial dilution recovery was acceptable; therefore, the matrix test passed for the sample matrix.

The WG1259915-3 MS recoveries, performed on L1930730-01, are outside the acceptance criteria for antimony (128%), magnesium (126%) and manganese (130%). A post digestion spike was performed and was within acceptance criteria.

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Case Narrative (continued)

The WG1259915-3 MS recoveries for calcium (165%), iron (210%) and sodium (55%), performed on L1930730-01, do not apply because the sample concentrations are greater than four times the spike amount added.

Dissolved Metals

The WG1259932-3 MS recovery for sodium (11%), performed on L1930730-01, does not apply because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Lisa Westerlind

Title: Technical Director/Representative

Date: 07/27/19

ORGANICS

VOLATILES

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/14/19 14:27
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	0.82	J	ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	2.7		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	106		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/14/19 14:55
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.32	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	1.1	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	1.1	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	4.9		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	105		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-03
 Client ID: GWTB05_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/14/19 12:05
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-03
Client ID: GWTB05_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-03
Client ID: GWTB05_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/14/19 12:34
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	5.1		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	106		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/14/19 15:23
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.32	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	1.1	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	1.1	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.3	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	4.8		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	0.77	J	ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/14/19 11:37
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1259943-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/14/19 11:37
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1259943-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 07/14/19 11:37
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1259943-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	108		70-130



Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1259943-3 WG1259943-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		96		70-130	4		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	95		93		70-130	2		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	110		100		70-130	10		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	100		99		62-150	1		20
1,2-Dichloroethane	95		92		70-130	3		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	94		95		70-130	1		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	97		99		54-136	2		20
1,1,1,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	110		100		70-130	10		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	70		69		64-130	1		20
Bromomethane	89		81		39-139	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1259943-3 WG1259943-4								
Vinyl chloride	88		86		55-140	2		20
Chloroethane	91		91		55-138	0		20
1,1-Dichloroethene	110		100		61-145	10		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	100		99		70-130	1		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	110		100		63-130	10		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		100		70-130	10		20
Dibromomethane	100		97		70-130	3		20
1,2,3-Trichloropropane	100		99		64-130	1		20
Acrylonitrile	97		90		70-130	7		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	85		82		36-147	4		20
Acetone	100		96		58-148	4		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	92		89		63-138	3		20
Vinyl acetate	89		86		70-130	3		20
4-Methyl-2-pentanone	100		90		59-130	11		20
2-Hexanone	86		87		57-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1259943-3 WG1259943-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	100		99		64-130	1		20
Bromobenzene	100		99		70-130	1		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	81		79		70-130	3		20
tert-Butylbenzene	110		100		70-130	10		20
o-Chlorotoluene	120		120		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	100		100		41-144	0		20
Hexachlorobutadiene	98		98		63-130	0		20
Isopropylbenzene	110		100		70-130	10		20
p-Isopropyltoluene	110		100		70-130	10		20
Naphthalene	96		95		70-130	1		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	100		97		70-130	3		20
1,2,4-Trichlorobenzene	100		96		70-130	4		20
1,3,5-Trimethylbenzene	110		100		64-130	10		20
1,2,4-Trimethylbenzene	110		100		70-130	10		20
1,4-Dioxane	162		168	Q	56-162	4		20
p-Diethylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1259943-3 WG1259943-4								
p-Ethyltoluene	110		100		70-130	10		20
1,2,4,5-Tetramethylbenzene	100		98		70-130	2		20
Ethyl ether	110		100		59-134	10		20
trans-1,4-Dichloro-2-butene	98		96		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		96		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	104		103		70-130

SEMIVOLATILES

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/14/19 22:16
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	49		10-120
4-Terphenyl-d14	72		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/13/19 10:52
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	169.		ng/l	150	33.9	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			42		15-110	

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/15/19 12:05
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.05	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	62		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 00:00
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	4.80		ng/l	1.96	0.400	1
Perfluoropentanoic Acid (PFPeA)	11.9		ng/l	1.96	0.388	1
Perfluorobutanesulfonic Acid (PFBS)	0.969	J	ng/l	1.96	0.233	1
Perfluorohexanoic Acid (PFHxA)	10.2		ng/l	1.96	0.322	1
Perfluoroheptanoic Acid (PFHpA)	2.56		ng/l	1.96	0.221	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.96	0.369	1
Perfluorooctanoic Acid (PFOA)	5.51		ng/l	1.96	0.231	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.96	1.30	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.96	0.674	1
Perfluorononanoic Acid (PFNA)	0.824	J	ng/l	1.96	0.306	1
Perfluorooctanesulfonic Acid (PFOS)	3.71		ng/l	1.96	0.494	1
Perfluorodecanoic Acid (PFDA)	0.349	J	ng/l	1.96	0.298	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.96	1.19	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.96	0.635	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.96	0.255	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.96	0.961	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.96	0.569	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.96	0.788	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.96	0.365	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.96	0.321	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.96	0.243	1
PFOA/PFOS, Total	9.22		ng/l	1.96	0.231	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	102		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	103		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	111		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	143		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	82		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	120		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	60		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	80		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	28		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	62		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	72		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/14/19 22:42
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		21-120
Phenol-d6	69		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	103		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/13/19 11:18
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	166.		ng/l	150	33.9	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			39		15-110	

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/15/19 12:22
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.08	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	119		10-120
4-Terphenyl-d14	91		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 00:17
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	10.6		ng/l	1.91	0.389	1
Perfluoropentanoic Acid (PFPeA)	7.74		ng/l	1.91	0.378	1
Perfluorobutanesulfonic Acid (PFBS)	1.12	J	ng/l	1.91	0.227	1
Perfluorohexanoic Acid (PFHxA)	6.12		ng/l	1.91	0.313	1
Perfluoroheptanoic Acid (PFHpA)	2.62		ng/l	1.91	0.215	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.91	0.359	1
Perfluorooctanoic Acid (PFOA)	6.44		ng/l	1.91	0.225	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.91	1.27	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.91	0.656	1
Perfluorononanoic Acid (PFNA)	1.68	J	ng/l	1.91	0.298	1
Perfluorooctanesulfonic Acid (PFOS)	9.03		ng/l	1.91	0.481	1
Perfluorodecanoic Acid (PFDA)	0.821	J	ng/l	1.91	0.290	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.91	1.16	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.91	0.618	1
Perfluoroundecanoic Acid (PFUnA)	0.828	J	ng/l	1.91	0.248	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.91	0.935	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.91	0.553	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.91	0.767	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.91	0.355	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.91	0.312	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.91	0.237	1
PFOA/PFOS, Total	15.5		ng/l	1.91	0.225	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	128		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	130		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	121		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	113		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	119		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	126		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	121		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	170		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	120		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	118		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	108		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	149		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	86		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	104		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	38		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	80		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	90		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	94		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/14/19 23:08
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		21-120
Phenol-d6	77		10-120
Nitrobenzene-d5	114		23-120
2-Fluorobiphenyl	96		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	100		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/13/19 11:44
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	150	33.9	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			39		15-110	

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/15/19 12:38
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	95		15-120
2,4,6-Tribromophenol	104		10-120
4-Terphenyl-d14	104		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 00:33
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.76	0.359	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.76	0.348	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.76	0.210	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.76	0.289	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.76	0.198	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.76	0.331	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.76	0.208	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.76	1.17	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.76	0.606	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.76	0.275	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.76	0.444	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.76	0.268	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.76	1.07	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.76	0.570	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.76	0.229	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.76	0.863	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.76	0.510	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.76	0.708	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.76	0.327	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.76	0.288	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.76	0.218	1
PFOA/PFOS, Total	ND		ng/l	1.76	0.208	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	133		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	139		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	133		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	137		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	135		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	133		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	131		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	107		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	137		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	129		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	125		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	116		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	128		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	78		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	95		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	115		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	113		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/14/19 23:34
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		21-120
Phenol-d6	68		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	101		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/13/19 12:10
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	181.		ng/l	150	33.9	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			40		15-110	

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/15/19 12:55
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.10		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	57		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	97		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 00:50
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	33.8		ng/l	1.84	0.376	1
Perfluoropentanoic Acid (PFPeA)	7.61		ng/l	1.84	0.365	1
Perfluorobutanesulfonic Acid (PFBS)	1.27	J	ng/l	1.84	0.220	1
Perfluorohexanoic Acid (PFHxA)	5.88		ng/l	1.84	0.302	1
Perfluoroheptanoic Acid (PFHpA)	2.59		ng/l	1.84	0.208	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.347	1
Perfluorooctanoic Acid (PFOA)	6.07		ng/l	1.84	0.218	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.84	1.23	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.635	1
Perfluorononanoic Acid (PFNA)	1.74	J	ng/l	1.84	0.288	1
Perfluorooctanesulfonic Acid (PFOS)	10.9		ng/l	1.84	0.465	1
Perfluorodecanoic Acid (PFDA)	1.50	J	ng/l	1.84	0.280	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.12	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.786	J	ng/l	1.84	0.598	1
Perfluoroundecanoic Acid (PFUnA)	1.56	J	ng/l	1.84	0.240	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.84	0.904	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.535	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.742	1
Perfluorododecanoic Acid (PFDoA)	1.02	J	ng/l	1.84	0.343	1
Perfluorotridecanoic Acid (PFTrDA)	0.878	J	ng/l	1.84	0.302	1
Perfluorotetradecanoic Acid (PFTA)	0.579	J	ng/l	1.84	0.229	1
PFOA/PFOS, Total	17.0		ng/l	1.84	0.218	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	137		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	139		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	150		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	132		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	139		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	155	Q	47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	144		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	201		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	142		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	145		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	127		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	194	Q	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	105		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	130		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	52		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	94		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	110		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	106		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/12/19 10:19
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258944-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	2.8	J	ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 07/12/19 10:19
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258944-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 07/12/19 10:19
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258944-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	84		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/12/19 12:00
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:52

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258945-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/12/19 12:00
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:52

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258945-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	82		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/13/19 09:37
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1259465-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		15-110

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/25/19 21:48
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1263687-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/25/19 21:48
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1263687-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	102		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	109		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	107		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	103		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	101		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	85		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	76		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	83		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	37		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	70		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	80		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258944-2 WG1258944-3								
Acenaphthene	77		76		37-111	1		30
1,2,4-Trichlorobenzene	73		76		39-98	4		30
Hexachlorobenzene	67		68		40-140	1		30
Bis(2-chloroethyl)ether	76		78		40-140	3		30
2-Chloronaphthalene	80		80		40-140	0		30
1,2-Dichlorobenzene	70		74		40-140	6		30
1,3-Dichlorobenzene	67		71		40-140	6		30
1,4-Dichlorobenzene	68		73		36-97	7		30
3,3'-Dichlorobenzidine	68		88		40-140	26		30
2,4-Dinitrotoluene	95		94		48-143	1		30
2,6-Dinitrotoluene	93		94		40-140	1		30
Fluoranthene	91		86		40-140	6		30
4-Chlorophenyl phenyl ether	77		76		40-140	1		30
4-Bromophenyl phenyl ether	73		75		40-140	3		30
Bis(2-chloroisopropyl)ether	65		67		40-140	3		30
Bis(2-chloroethoxy)methane	88		87		40-140	1		30
Hexachlorobutadiene	68		68		40-140	0		30
Hexachlorocyclopentadiene	75		71		40-140	5		30
Hexachloroethane	73		78		40-140	7		30
Isophorone	95		95		40-140	0		30
Naphthalene	75		77		40-140	3		30
Nitrobenzene	86		87		40-140	1		30
NDPA/DPA	71		84		40-140	17		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258944-2 WG1258944-3								
n-Nitrosodi-n-propylamine	97		95		29-132	2		30
Bis(2-ethylhexyl)phthalate	102		94		40-140	8		30
Butyl benzyl phthalate	115		102		40-140	12		30
Di-n-butylphthalate	96		90		40-140	6		30
Di-n-octylphthalate	121		113		40-140	7		30
Diethyl phthalate	91		90		40-140	1		30
Dimethyl phthalate	99		96		40-140	3		30
Benzo(a)anthracene	92		91		40-140	1		30
Benzo(a)pyrene	85		83		40-140	2		30
Benzo(b)fluoranthene	94		83		40-140	12		30
Benzo(k)fluoranthene	90		96		40-140	6		30
Chrysene	77		77		40-140	0		30
Acenaphthylene	90		90		45-123	0		30
Anthracene	84		86		40-140	2		30
Benzo(ghi)perylene	88		88		40-140	0		30
Fluorene	83		82		40-140	1		30
Phenanthrene	82		78		40-140	5		30
Dibenzo(a,h)anthracene	84		84		40-140	0		30
Indeno(1,2,3-cd)pyrene	82		84		40-140	2		30
Pyrene	88		83		26-127	6		30
Biphenyl	74		72		40-140	3		30
4-Chloroaniline	63		61		40-140	3		30
2-Nitroaniline	97		94		52-143	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258944-2 WG1258944-3								
3-Nitroaniline	78		76		25-145	3		30
4-Nitroaniline	94		87		51-143	8		30
Dibenzofuran	77		77		40-140	0		30
2-Methylnaphthalene	76		76		40-140	0		30
1,2,4,5-Tetrachlorobenzene	64		65		2-134	2		30
Acetophenone	74		75		39-129	1		30
2,4,6-Trichlorophenol	92		91		30-130	1		30
p-Chloro-m-cresol	100	Q	96		23-97	4		30
2-Chlorophenol	86		87		27-123	1		30
2,4-Dichlorophenol	95		94		30-130	1		30
2,4-Dimethylphenol	81		94		30-130	15		30
2-Nitrophenol	96		95		30-130	1		30
4-Nitrophenol	84	Q	80		10-80	5		30
2,4-Dinitrophenol	102		99		20-130	3		30
4,6-Dinitro-o-cresol	109		107		20-164	2		30
Pentachlorophenol	96		93		9-103	3		30
Phenol	66		72		12-110	9		30
2-Methylphenol	84		89		30-130	6		30
3-Methylphenol/4-Methylphenol	87		91		30-130	4		30
2,4,5-Trichlorophenol	93		88		30-130	6		30
Benzoic Acid	113		112		10-164	1		30
Benzyl Alcohol	91		92		26-116	1		30
Carbazole	93		89		55-144	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258944-2 WG1258944-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	75		84		21-120
Phenol-d6	69		74		10-120
Nitrobenzene-d5	96		95		23-120
2-Fluorobiphenyl	82		78		15-120
2,4,6-Tribromophenol	76		77		10-120
4-Terphenyl-d14	87		79		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258945-2 WG1258945-3								
Acenaphthene	74		78		40-140	5		40
2-Chloronaphthalene	74		74		40-140	0		40
Fluoranthene	76		75		40-140	1		40
Hexachlorobutadiene	66		68		40-140	3		40
Naphthalene	74		75		40-140	1		40
Benzo(a)anthracene	77		78		40-140	1		40
Benzo(a)pyrene	66		82		40-140	22		40
Benzo(b)fluoranthene	80		78		40-140	3		40
Benzo(k)fluoranthene	84		83		40-140	1		40
Chrysene	77		79		40-140	3		40
Acenaphthylene	75		77		40-140	3		40
Anthracene	78		82		40-140	5		40
Benzo(ghi)perylene	77		79		40-140	3		40
Fluorene	77		77		40-140	0		40
Phenanthrene	78		77		40-140	1		40
Dibenzo(a,h)anthracene	85		83		40-140	2		40
Indeno(1,2,3-cd)pyrene	80		82		40-140	2		40
Pyrene	72		74		40-140	3		40
2-Methylnaphthalene	74		75		40-140	1		40
Pentachlorophenol	93		87		40-140	7		40
Hexachlorobenzene	81		81		40-140	0		40
Hexachloroethane	73		75		40-140	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258945-2 WG1258945-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	53		66		21-120
Phenol-d6	42		54		10-120
Nitrobenzene-d5	77		79		23-120
2-Fluorobiphenyl	69		70		15-120
2,4,6-Tribromophenol	75		85		10-120
4-Terphenyl-d14	76		75		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259465-2 WG1259465-3								
1,4-Dioxane	105		108		40-140	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	46		37		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1263687-2 WG1263687-3								
Perfluorobutanoic Acid (PFBA)	97		99		67-148	2		30
Perfluoropentanoic Acid (PFPeA)	104		106		63-161	2		30
Perfluorobutanesulfonic Acid (PFBS)	98		99		65-157	1		30
Perfluorohexanoic Acid (PFHxA)	108		110		69-168	2		30
Perfluoroheptanoic Acid (PFHpA)	98		98		58-159	0		30
Perfluorohexanesulfonic Acid (PFHxS)	104		107		69-177	3		30
Perfluorooctanoic Acid (PFOA)	101		102		63-159	1		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	102		108		49-187	6		30
Perfluoroheptanesulfonic Acid (PFHpS)	110		101		61-179	9		30
Perfluorononanoic Acid (PFNA)	106		105		68-171	1		30
Perfluorooctanesulfonic Acid (PFOS)	86		86		52-151	0		30
Perfluorodecanoic Acid (PFDA)	106		111		63-171	5		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	108		113		56-173	5		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	104		100		60-166	4		30
Perfluoroundecanoic Acid (PFUnA)	92		94		60-153	2		30
Perfluorodecanesulfonic Acid (PFDS)	101		101		38-156	0		30
Perfluorooctanesulfonamide (FOSA)	105		97		46-170	8		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	96		87		45-170	10		30
Perfluorododecanoic Acid (PFDoA)	96		100		67-153	4		30
Perfluorotridecanoic Acid (PFTrDA)	91		100		48-158	9		30
Perfluorotetradecanoic Acid (PFTA)	110		109		59-182	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1263687-2 WG1263687-3									

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	109		118		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		125		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	115		120		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	111		122		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		119		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	116		115		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		116		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	92		102		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	108		116		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		108		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98		99		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95		97		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	80		93		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96		99		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	39		49		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	79		85		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	88		93		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		99		33-143

PCBS

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 07/14/19 23:36
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:04
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/13/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/14/19 23:49
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/13/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	56		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/14/19 23:22
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/13/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/15/19 00:03
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/13/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/13/19 11:34
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 09:42
Cleanup Method: EPA 3665A
Cleanup Date: 07/12/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259122-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	88		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259122-2 WG1259122-3									
Aroclor 1016	70		77		40-140	9		50	A
Aroclor 1260	68		81		40-140	17		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		82		30-150	A
Decachlorobiphenyl	82		103		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		78		30-150	B
Decachlorobiphenyl	79		96		30-150	B

PESTICIDES

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/16/19 10:31
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 404 EXTERIOR STREET**Lab Number:** L1930730**Project Number:** 170487001**Report Date:** 07/27/19**SAMPLE RESULTS**

Lab ID: L1930730-01

Date Collected: 07/12/19 10:35

Client ID: RMW25_071219

Date Received: 07/12/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 07/16/19 11:27
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 07/13/19 02:47

Methylation Date: 07/14/19 12:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	92		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/16/19 10:43
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 07/16/19 11:46
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 07/13/19 02:47

Methylation Date: 07/14/19 12:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	87		30-150	A
DCAA	73		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/16/19 10:56
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 404 EXTERIOR STREET**Lab Number:** L1930730**Project Number:** 170487001**Report Date:** 07/27/19**SAMPLE RESULTS**

Lab ID: L1930730-04

Date Collected: 07/12/19 13:00

Client ID: GWFB_071219

Date Received: 07/12/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	79		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 07/16/19 01:17
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 07/13/19 02:47

Methylation Date: 07/14/19 12:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	100		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/16/19 11:09
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 07/16/19 12:05
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 07/13/19 02:47

Methylation Date: 07/14/19 12:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	103		30-150	A
DCAA	87		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/16/19 11:21
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 09:54

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259126-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	0.003	JP	ug/l	0.014	0.002	A
Endrin aldehyde	0.013	JP	ug/l	0.029	0.006	A
Endrin ketone	0.010	JP	ug/l	0.029	0.003	A
Dieldrin	0.004	J	ug/l	0.029	0.003	A
Endosulfan I	0.004	J	ug/l	0.014	0.002	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
Chlordane	ND		ug/l	0.143	0.033	A
Lindane	0.004	JP	ug/l	0.014	0.003	B
Alpha-BHC	ND		ug/l	0.014	0.003	B
Aldrin	0.002	J	ug/l	0.014	0.002	B
Heptachlor epoxide	ND		ug/l	0.014	0.003	B
Endrin	ND		ug/l	0.029	0.003	B
4,4'-DDE	ND		ug/l	0.029	0.003	B
4,4'-DDD	ND		ug/l	0.029	0.003	B
4,4'-DDT	0.003	JP	ug/l	0.029	0.003	B
Endosulfan II	0.004	J	ug/l	0.029	0.004	B
Methoxychlor	ND		ug/l	0.143	0.005	B
trans-Chlordane	0.006	J	ug/l	0.014	0.004	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/16/19 11:21
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 09:54

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259126-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 07/15/19 15:35
Analyst: SL

Extraction Method: EPA 8151A
Extraction Date: 07/12/19 10:39

Methylation Date: 07/12/19 18:58

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259159-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	80		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259126-2 WG1259126-3									
Delta-BHC	89		82		30-150	8		20	A
Lindane	86		80		30-150	7		20	A
Alpha-BHC	87		80		30-150	8		20	A
Beta-BHC	88		80		30-150	9		20	A
Heptachlor	80		75		30-150	7		20	A
Aldrin	77		71		30-150	8		20	A
Heptachlor epoxide	85		80		30-150	7		20	A
Endrin	85		80		30-150	5		20	A
Endrin aldehyde	72		68		30-150	6		20	A
Endrin ketone	86		80		30-150	7		20	A
Dieldrin	86		80		30-150	8		20	A
4,4'-DDE	85		77		30-150	11		20	A
4,4'-DDD	85		79		30-150	8		20	A
4,4'-DDT	82		76		30-150	7		20	A
Endosulfan I	78		71		30-150	9		20	A
Endosulfan II	81		75		30-150	7		20	A
Endosulfan sulfate	77		73		30-150	5		20	A
Methoxychlor	72		68		30-150	6		20	A
cis-Chlordane	83		78		30-150	6		20	A
trans-Chlordane	81		75		30-150	8		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259126-2 WG1259126-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		74		30-150	A
Decachlorobiphenyl	71		66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		80		30-150	B
Decachlorobiphenyl	95		84		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259159-2 WG1259159-3									
2,4-D	114		106		30-150	7		25	A
2,4,5-T	127		117		30-150	8		25	A
2,4,5-TP (Silvex)	121		111		30-150	9		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	94		86		30-150	A
DCAA	91		83		30-150	B



METALS

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.85		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Antimony, Total	0.00132	J	mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00663		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Barium, Total	0.08246		mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00016	J	mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Calcium, Total	82.8		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Chromium, Total	0.00456		mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00395		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Copper, Total	0.03070		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Iron, Total	10.6		mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Lead, Total	0.1360		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Magnesium, Total	13.2		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Manganese, Total	1.444		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:35	EPA 7470A	1,7470A	GD
Nickel, Total	0.00609		mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Potassium, Total	12.5		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Sodium, Total	70.7		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00483	J	mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Zinc, Total	0.1069		mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		07/16/19 10:13	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0113		mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00121	J	mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00518		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.05286		mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Calcium, Dissolved	83.6		mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00023	J	mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00215		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00051	J	mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Iron, Dissolved	6.95		mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00087	J	mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	12.7		mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.270		mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 13:29	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00316		mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Potassium, Dissolved	12.7		mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Sodium, Dissolved	73.0		mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.02495		mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0499		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Antimony, Total	0.00058	J	mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00172		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Barium, Total	0.06463		mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00009	J	mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Calcium, Total	72.3		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Chromium, Total	0.00026	J	mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00136		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Copper, Total	0.01157		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Iron, Total	1.20		mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Lead, Total	0.00477		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Magnesium, Total	17.6		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Manganese, Total	1.403		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:36	EPA 7470A	1,7470A	GD
Nickel, Total	0.00193	J	mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Potassium, Total	11.7		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Sodium, Total	75.1		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Zinc, Total	0.01406		mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		07/16/19 10:17	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00414	J	mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00072	J	mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00136		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.06076		mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Calcium, Dissolved	71.4		mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00113		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00458		mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.728		mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00120		mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	16.6		mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.324		mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 14:16	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00172	J	mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Potassium, Dissolved	11.6		mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Sodium, Dissolved	70.7		mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01399		mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Barium, Total	0.00028	J	mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Iron, Total	0.0297	J	mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:38	EPA 7470A	1,7470A	GD
Nickel, Total	ND		mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Zinc, Total	0.00673	J	mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		07/16/19 09:51	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.00041	J	mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Calcium, Dissolved	0.0908	J	mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00018	J	mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 14:18	EPA 7470A	1,7470A	GD
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Sodium, Dissolved	0.0327	J	mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01215		mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.118		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Antimony, Total	0.00052	J	mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00159		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Barium, Total	0.06147		mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Calcium, Total	66.7		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Chromium, Total	0.00049	J	mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00136		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Copper, Total	0.01137		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Iron, Total	1.20		mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Lead, Total	0.00702		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Magnesium, Total	16.5		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Manganese, Total	1.348		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:43	EPA 7470A	1,7470A	GD
Nickel, Total	0.00196	J	mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Potassium, Total	11.0		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Sodium, Total	70.4		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Zinc, Total	0.01534		mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		07/16/19 10:21	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00362	J	mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00052	J	mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00138		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.05821		mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Calcium, Dissolved	65.9		mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00113		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00437		mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.656		mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00129		mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	15.8		mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.288		mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 14:20	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00176	J	mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Potassium, Dissolved	10.7		mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Sodium, Dissolved	66.6		mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01134		mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1259915-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Antimony, Total	0.00075	J	mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Iron, Total	0.0403	J	mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Manganese, Total	0.02228		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Thallium, Total	0.00022	J	mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1259932-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Antimony, Dissolved	0.00071	J	mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis Batch Quality Control

Barium, Dissolved	ND	mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Beryllium, Dissolved	ND	mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Cadmium, Dissolved	ND	mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Calcium, Dissolved	ND	mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Chromium, Dissolved	ND	mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Cobalt, Dissolved	ND	mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Copper, Dissolved	ND	mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Iron, Dissolved	ND	mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Lead, Dissolved	ND	mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Magnesium, Dissolved	ND	mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Manganese, Dissolved	ND	mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Nickel, Dissolved	ND	mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Potassium, Dissolved	ND	mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Selenium, Dissolved	ND	mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Silver, Dissolved	ND	mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Sodium, Dissolved	ND	mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Thallium, Dissolved	ND	mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Vanadium, Dissolved	ND	mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Zinc, Dissolved	ND	mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1260028-1									
Mercury, Total	ND	mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:03	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1260047-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 13:19	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259915-2								
Aluminum, Total	115		-		80-120	-		
Antimony, Total	98		-		80-120	-		
Arsenic, Total	107		-		80-120	-		
Barium, Total	105		-		80-120	-		
Beryllium, Total	116		-		80-120	-		
Cadmium, Total	112		-		80-120	-		
Calcium, Total	109		-		80-120	-		
Chromium, Total	110		-		80-120	-		
Cobalt, Total	109		-		80-120	-		
Copper, Total	101		-		80-120	-		
Iron, Total	118		-		80-120	-		
Lead, Total	113		-		80-120	-		
Magnesium, Total	113		-		80-120	-		
Manganese, Total	109		-		80-120	-		
Nickel, Total	106		-		80-120	-		
Potassium, Total	109		-		80-120	-		
Selenium, Total	113		-		80-120	-		
Silver, Total	106		-		80-120	-		
Sodium, Total	110		-		80-120	-		
Thallium, Total	108		-		80-120	-		
Vanadium, Total	111		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259915-2					
Zinc, Total	116	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259932-2					
Aluminum, Dissolved	110	-	80-120	-	
Antimony, Dissolved	88	-	80-120	-	
Arsenic, Dissolved	103	-	80-120	-	
Barium, Dissolved	104	-	80-120	-	
Beryllium, Dissolved	102	-	80-120	-	
Cadmium, Dissolved	106	-	80-120	-	
Calcium, Dissolved	95	-	80-120	-	
Chromium, Dissolved	101	-	80-120	-	
Cobalt, Dissolved	97	-	80-120	-	
Copper, Dissolved	94	-	80-120	-	
Iron, Dissolved	98	-	80-120	-	
Lead, Dissolved	102	-	80-120	-	
Magnesium, Dissolved	108	-	80-120	-	
Manganese, Dissolved	103	-	80-120	-	
Nickel, Dissolved	97	-	80-120	-	
Potassium, Dissolved	108	-	80-120	-	
Selenium, Dissolved	113	-	80-120	-	
Silver, Dissolved	97	-	80-120	-	
Sodium, Dissolved	106	-	80-120	-	
Thallium, Dissolved	98	-	80-120	-	
Vanadium, Dissolved	99	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259932-2					
Zinc, Dissolved	108	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1260028-2					
Mercury, Total	93	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1260047-2					
Mercury, Dissolved	92	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259915-3 QC Sample: L1930730-01 Client ID: RMW25_071219												
Aluminum, Total	1.85	2	5.03	159	Q	-	-		75-125	-		20
Antimony, Total	0.00132J	0.5	0.6399	128	Q	-	-		75-125	-		20
Arsenic, Total	0.00663	0.12	0.1355	107		-	-		75-125	-		20
Barium, Total	0.08246	2	2.211	106		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.05837	117		-	-		75-125	-		20
Cadmium, Total	0.00016J	0.051	0.05703	112		-	-		75-125	-		20
Calcium, Total	82.8	10	99.3	165	Q	-	-		75-125	-		20
Chromium, Total	0.00456	0.2	0.2260	111		-	-		75-125	-		20
Cobalt, Total	0.00395	0.5	0.5400	107		-	-		75-125	-		20
Copper, Total	0.03070	0.25	0.2852	102		-	-		75-125	-		20
Iron, Total	10.6	1	12.7	210	Q	-	-		75-125	-		20
Lead, Total	0.1360	0.51	0.7256	116		-	-		75-125	-		20
Magnesium, Total	13.2	10	25.8	126	Q	-	-		75-125	-		20
Manganese, Total	1.444	0.5	2.093	130	Q	-	-		75-125	-		20
Nickel, Total	0.00609	0.5	0.5255	104		-	-		75-125	-		20
Potassium, Total	12.5	10	24.6	121		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.136	113		-	-		75-125	-		20
Silver, Total	ND	0.05	0.05315	106		-	-		75-125	-		20
Sodium, Total	70.7	10	76.2	55	Q	-	-		75-125	-		20
Thallium, Total	ND	0.12	0.1328	111		-	-		75-125	-		20
Vanadium, Total	0.00483J	0.5	0.5758	115		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259915-3 QC Sample: L1930730-01 Client ID: RMW25_071219									
Zinc, Total	0.1069	0.5	0.6862	116	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259932-3 QC Sample: L1930730-01 Client ID: RMW25_071219									
Aluminum, Dissolved	0.0113	2	2.30	114	-	-	75-125	-	20
Antimony, Dissolved	0.00121J	0.5	0.6258	125	-	-	75-125	-	20
Arsenic, Dissolved	0.00518	0.12	0.1293	103	-	-	75-125	-	20
Barium, Dissolved	0.05286	2	2.160	105	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.04972	99	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05435	106	-	-	75-125	-	20
Calcium, Dissolved	83.6	10	93.9	103	-	-	75-125	-	20
Chromium, Dissolved	0.00023J	0.2	0.2021	101	-	-	75-125	-	20
Cobalt, Dissolved	0.00215	0.5	0.5068	101	-	-	75-125	-	20
Copper, Dissolved	0.00051J	0.25	0.2389	96	-	-	75-125	-	20
Iron, Dissolved	6.95	1	8.00	105	-	-	75-125	-	20
Lead, Dissolved	0.00087J	0.51	0.5526	108	-	-	75-125	-	20
Magnesium, Dissolved	12.7	10	24.5	118	-	-	75-125	-	20
Manganese, Dissolved	1.270	0.5	1.856	117	-	-	75-125	-	20
Nickel, Dissolved	0.00316	0.5	0.4942	98	-	-	75-125	-	20
Potassium, Dissolved	12.7	10	22.8	101	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.141	118	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05038	101	-	-	75-125	-	20
Sodium, Dissolved	73.0	10	74.1	11	Q	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1269	106	-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.5200	104	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259932-3 QC Sample: L1930730-01 Client ID: RMW25_071219									
Zinc, Dissolved	0.02495	0.5	0.5819	111	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1260028-3 WG1260028-4 QC Sample: L1929167-02 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00437	87	0.00431	86	75-125	1	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1260047-3 QC Sample: L1929714-04 Client ID: MS Sample									
Mercury, Dissolved	ND	0.005	0.00436	87	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259915-4 QC Sample: L1930730-01 Client ID: RMW25_071219						
Aluminum, Total	1.85	1.82	mg/l	2		20
Antimony, Total	0.00132J	0.00299J	mg/l	NC		20
Arsenic, Total	0.00663	0.00638	mg/l	4		20
Barium, Total	0.08246	0.08286	mg/l	0		20
Beryllium, Total	ND	0.00015J	mg/l	NC		20
Cadmium, Total	0.00016J	0.00016J	mg/l	NC		20
Calcium, Total	82.8	82.3	mg/l	1		20
Chromium, Total	0.00456	0.00449	mg/l	2		20
Cobalt, Total	0.00395	0.00381	mg/l	4		20
Copper, Total	0.03070	0.03011	mg/l	2		20
Iron, Total	10.6	10.5	mg/l	1		20
Lead, Total	0.1360	0.1345	mg/l	1		20
Magnesium, Total	13.2	13.0	mg/l	2		20
Manganese, Total	1.444	1.434	mg/l	1		20
Nickel, Total	0.00609	0.00599	mg/l	2		20
Potassium, Total	12.5	12.5	mg/l	0		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Sodium, Total	70.7	70.6	mg/l	0		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259915-4 QC Sample: L1930730-01 Client ID: RMW25_071219					
Thallium, Total	ND	0.00020J	mg/l	NC	20
Vanadium, Total	0.00483J	0.00445J	mg/l	NC	20
Zinc, Total	0.1069	0.1042	mg/l	3	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259932-4 QC Sample: L1930730-01 Client ID: RMW25_071219					
Aluminum, Dissolved	0.0113	0.0117	mg/l	3	20
Antimony, Dissolved	0.00121J	0.00332J	mg/l	NC	20
Arsenic, Dissolved	0.00518	0.00532	mg/l	3	20
Barium, Dissolved	0.05286	0.05426	mg/l	3	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	83.6	86.2	mg/l	3	20
Chromium, Dissolved	0.00023J	0.00022J	mg/l	NC	20
Cobalt, Dissolved	0.00215	0.00209	mg/l	3	20
Copper, Dissolved	0.00051J	0.00055J	mg/l	NC	20
Iron, Dissolved	6.95	6.89	mg/l	1	20
Lead, Dissolved	0.00087J	0.00095J	mg/l	NC	20
Magnesium, Dissolved	12.7	12.9	mg/l	2	20
Manganese, Dissolved	1.270	1.292	mg/l	2	20
Nickel, Dissolved	0.00316	0.00321	mg/l	2	20
Potassium, Dissolved	12.7	13.1	mg/l	3	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	73.0	73.0	mg/l	0	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259932-4 QC Sample: L1930730-01 Client ID: RMW25_071219					
Thallium, Dissolved	ND	0.00022J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.02495	0.02468	mg/l	1	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1260047-4 QC Sample: L1929714-04 Client ID: DUP Sample					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 13:17	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:56	1,7196A	MA



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 13:18	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:56	1,7196A	MA



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 13:19	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:57	1,7196A	MA



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 13:20	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:57	1,7196A	MA



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259435-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:55	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259715-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 12:40	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259435-2								
Chromium, Hexavalent	101		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259715-2 WG1259715-3								
Cyanide, Total	95		96		85-115	1		20

Matrix Spike Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259435-4 QC Sample: L1930730-05 Client ID: GWDUP_071219												
Chromium, Hexavalent	ND	0.1	0.098	98		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259715-4 WG1259715-5 QC Sample: L1930690-03 Client ID: MS Sample												
Cyanide, Total	0.013	0.2	0.122	54	Q	0.172	79	Q	80-120	34	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259435-3 QC Sample: L1930730-05 Client ID: GWDUP_071219						
Chromium, Hexavalent	ND	ND	mg/l	NC		20

Project Name: 404 EXTERIOR STREET**Lab Number:** L1930730**Project Number:** 170487001**Report Date:** 07/27/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-01A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-01B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-01C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-01D	Plastic 250ml unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-01E	Plastic 250ml unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-01F	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1930730-01G	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1930730-01H	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930730-01I	Plastic 500ml unpreserved	A	7	7	2.3	Y	Absent		HEXCR-7196(1)
L1930730-01J	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1930730-01K	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1930730-01L	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1930730-01M	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1930730-01N	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)

Project Name: 404 EXTERIOR STREET

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Project Number: 170487001

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-01O	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-01P	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-01Q	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-01R	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1930730-01S	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1930730-02A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-02B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-02C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-02D	Plastic 250ml unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-02E	Plastic 250ml unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-02F	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1930730-02G	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1930730-02H	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930730-02I	Plastic 500ml unpreserved	A	7	7	2.3	Y	Absent		HEXCR-7196(1)
L1930730-02J	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1930730-02K	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1930730-02L	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1930730-02M	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1930730-02N	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-02O	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-02P	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-02Q	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-02R	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1930730-02S	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1930730-03A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-03B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-04A	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-04B	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-04C	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-04D	Plastic 250ml unpreserved	B	NA		2.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-04F	Plastic 250ml NaOH preserved	B	>12	>12	2.0	Y	Absent		TCN-9010(14)
L1930730-04G	Plastic 250ml HNO3 preserved	B	<2	<2	2.0	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1930730-04H	Plastic 250ml HNO3 preserved	B	<2	<2	2.0	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930730-04I	Plastic 500ml unpreserved	B	7	7	2.0	Y	Absent		HEXCR-7196(1)
L1930730-04J	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8082-LVI(7)
L1930730-04K	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8082-LVI(7)
L1930730-04L	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8081(7)
L1930730-04M	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8081(7)
L1930730-04N	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-04O	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-04P	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-04Q	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-04R	Amber 1000ml unpreserved	B	7	7	2.0	Y	Absent		HERB-APA(7)
L1930730-04S	Amber 1000ml unpreserved	B	7	7	2.0	Y	Absent		HERB-APA(7)
L1930730-05A	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-05B	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-05C	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-05D	Plastic 250ml unpreserved	B	NA		2.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-05E	Plastic 250ml unpreserved	B	NA		2.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-05F	Plastic 250ml NaOH preserved	B	>12	>12	2.0	Y	Absent		TCN-9010(14)
L1930730-05G	Plastic 250ml HNO3 preserved	B	<2	<2	2.0	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1930730-05H	Plastic 250ml HNO3 preserved	B	<2	<2	2.0	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930730-05I	Plastic 500ml unpreserved	B	7	7	2.0	Y	Absent		HEXCR-7196(1)
L1930730-05J	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8082-LVI(7)
L1930730-05K	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8082-LVI(7)
L1930730-05L	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8081(7)
L1930730-05M	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8081(7)
L1930730-05N	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-05O	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-05P	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-05Q	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-05R	Amber 1000ml unpreserved	B	7	7	2.0	Y	Absent		HERB-APA(7)
L1930730-05S	Amber 1000ml unpreserved	B	7	7	2.0	Y	Absent		HERB-APA(7)

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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers



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- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



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Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page		Date Rec'd in Lab <u>7/12/19</u>	ALPHA Job # <u>L1930730</u>																																																																																																									
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Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information		Deliverables																																																																																																										
Client Information Client: <u>LANGAN ENG</u> Address: <u>360 W 31st ST</u> <u>NEW YORK, NY</u> Phone: <u>212 479 5400</u> Fax: _____ Email: <u>jleung@langan.com</u>		Project Name: <u>404 EXTERIOR STREET</u> Project Location: <u>BRONX, NY</u> Project # <u>170487001</u> (Use Project name as Project #) <input type="checkbox"/>		<input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other																																																																																																										
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Sample Specific Comments																																																																																																								
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ANALYTICAL REPORT

Lab Number:	L1852610
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE + E. 146TH ST.
Project Number:	170487001
Report Date:	01/03/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1852610-01	RB07_0-2	SOIL	BRONX, NY	12/20/18 12:10	12/20/18
L1852610-02	RB07_8-10	SOIL	BRONX, NY	12/20/18 13:30	12/20/18
L1852610-03	RB07_10-12	SOIL	BRONX, NY	12/20/18 13:45	12/20/18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Total Metals

L1852610-01, -02 and -03: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1192853-3 MS recovery, performed on L1852610-01, is outside the acceptance criteria for barium (18%). A post digestion spike was performed and was within acceptance criteria.

The WG1192853-3 MS recoveries for calcium (1380%), iron (686%), magnesium (127%) and manganese (190%), performed on L1852610-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1192853-3 MS recovery, performed on L1852610-01, is outside the acceptance criteria for lead (11%). A post digestion spike was performed and yielded an unacceptable recovery for lead (75%). The serial dilution recovery was acceptable; therefore, the matrix test passed for the sample matrix.


The WG1192853-4 Laboratory Duplicate RPD for zinc (28%), performed on L1852610-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

Cyanide, Total

The WG1192409-2/-3 LCS/LCSD recoveries (71%/77%), associated with L1852610-01 through -03, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 01/03/19

ORGANICS

VOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 12/28/18 10:58
 Analyst: MKS
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.0	3.2	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.1	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.32	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.37	1
Tetrachloroethene	ND		ug/kg	0.70	0.27	1
Chlorobenzene	ND		ug/kg	0.70	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.6	0.97	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.36	1
1,1,1-Trichloroethane	ND		ug/kg	0.70	0.23	1
Bromodichloromethane	ND		ug/kg	0.70	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.38	1
cis-1,3-Dichloropropene	ND		ug/kg	0.70	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.70	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.70	0.22	1
Bromoform	ND		ug/kg	5.6	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.70	0.23	1
Benzene	ND		ug/kg	0.70	0.23	1
Toluene	ND		ug/kg	1.4	0.76	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.6	1.3	1
Bromomethane	ND		ug/kg	2.8	0.81	1
Vinyl chloride	ND		ug/kg	1.4	0.47	1
Chloroethane	ND		ug/kg	2.8	0.63	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.19	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-01

Date Collected: 12/20/18 12:10

Client ID: RB07_0-2

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.70	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.28	1
p/m-Xylene	ND		ug/kg	2.8	0.78	1
o-Xylene	ND		ug/kg	1.4	0.41	1
Xylenes, Total	ND		ug/kg	1.4	0.41	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.8	0.33	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	ND		ug/kg	14	6.7	1
Carbon disulfide	ND		ug/kg	14	6.4	1
2-Butanone	ND		ug/kg	14	3.1	1
Vinyl acetate	ND		ug/kg	14	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	0.18	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.8	0.29	1
2,2-Dichloropropane	ND		ug/kg	2.8	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.39	1
1,3-Dichloropropane	ND		ug/kg	2.8	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.70	0.18	1
Bromobenzene	ND		ug/kg	2.8	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.8	0.16	1
o-Chlorotoluene	ND		ug/kg	2.8	0.27	1
p-Chlorotoluene	ND		ug/kg	2.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.6	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.6	0.91	1
Acrylonitrile	ND		ug/kg	5.6	1.6	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
Client ID: RB07_0-2
Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
Date Received: 12/20/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.45	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.38	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.27	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	0.47	1
1,4-Dioxane	ND		ug/kg	140	49.	1
p-Diethylbenzene	ND		ug/kg	2.8	0.25	1
p-Ethyltoluene	ND		ug/kg	2.8	0.54	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.8	0.27	1
Ethyl ether	ND		ug/kg	2.8	0.48	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.0	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 12/28/18 11:24
 Analyst: MKS
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.5	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.90	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.90	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.90	0.11	1
Dibromochloromethane	ND		ug/kg	0.90	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.90	0.24	1
Tetrachloroethene	ND		ug/kg	0.45	0.18	1
Chlorobenzene	ND		ug/kg	0.45	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.62	1
1,2-Dichloroethane	ND		ug/kg	0.90	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.45	0.15	1
Bromodichloromethane	ND		ug/kg	0.45	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.45	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.45	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.45	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.45	0.15	1
Benzene	0.87		ug/kg	0.45	0.15	1
Toluene	0.59	J	ug/kg	0.90	0.49	1
Ethylbenzene	ND		ug/kg	0.90	0.13	1
Chloromethane	ND		ug/kg	3.6	0.84	1
Bromomethane	ND		ug/kg	1.8	0.52	1
Vinyl chloride	ND		ug/kg	0.90	0.30	1
Chloroethane	ND		ug/kg	1.8	0.41	1
1,1-Dichloroethene	ND		ug/kg	0.90	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.12	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-02

Date Collected: 12/20/18 13:30

Client ID: RB07_8-10

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.45	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.50	1
o-Xylene	ND		ug/kg	0.90	0.26	1
Xylenes, Total	ND		ug/kg	0.90	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.90	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.90	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.21	1
Styrene	ND		ug/kg	0.90	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.0	0.82	1
Acetone	ND		ug/kg	9.0	4.3	1
Carbon disulfide	ND		ug/kg	9.0	4.1	1
2-Butanone	ND		ug/kg	9.0	2.0	1
Vinyl acetate	ND		ug/kg	9.0	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	9.0	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.11	1
2-Hexanone	ND		ug/kg	9.0	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.90	0.25	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.45	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.90	0.15	1
sec-Butylbenzene	ND		ug/kg	0.90	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.90	1
Hexachlorobutadiene	ND		ug/kg	3.6	0.15	1
Isopropylbenzene	ND		ug/kg	0.90	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.90	0.10	1
Naphthalene	ND		ug/kg	3.6	0.58	1
Acrylonitrile	ND		ug/kg	3.6	1.0	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
Client ID: RB07_8-10
Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
Date Received: 12/20/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.90	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1
1,4-Dioxane	ND		ug/kg	90	32.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.34	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.5	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	93		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 12/28/18 11:50
 Analyst: MKS
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.26	1
Tetrachloroethene	ND		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.69	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.16	1
Benzene	0.40	J	ug/kg	0.50	0.16	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.93	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.33	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
Client ID: RB07_10-12
Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
Date Received: 12/20/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.91	1
Acetone	19		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.5	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	0.99	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.1	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	100	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 12/28/18 09:15
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03 Batch: WG1193693-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.95	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/28/18 09:15
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03 Batch: WG1193693-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 12/28/18 09:15
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03 Batch: WG1193693-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	92		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1193693-3 WG1193693-4								
Methylene chloride	91		83		70-130	9		30
1,1-Dichloroethane	97		92		70-130	5		30
Chloroform	84		79		70-130	6		30
Carbon tetrachloride	95		88		70-130	8		30
1,2-Dichloropropane	98		92		70-130	6		30
Dibromochloromethane	95		94		70-130	1		30
1,1,2-Trichloroethane	88		86		70-130	2		30
Tetrachloroethene	96		91		70-130	5		30
Chlorobenzene	90		85		70-130	6		30
Trichlorofluoromethane	94		85		70-139	10		30
1,2-Dichloroethane	93		89		70-130	4		30
1,1,1-Trichloroethane	93		87		70-130	7		30
Bromodichloromethane	84		82		70-130	2		30
trans-1,3-Dichloropropene	91		89		70-130	2		30
cis-1,3-Dichloropropene	86		83		70-130	4		30
1,1-Dichloropropene	88		83		70-130	6		30
Bromoform	94		92		70-130	2		30
1,1,2,2-Tetrachloroethane	86		86		70-130	0		30
Benzene	84		78		70-130	7		30
Toluene	88		83		70-130	6		30
Ethylbenzene	88		83		70-130	6		30
Chloromethane	134	Q	127		52-130	5		30
Bromomethane	158	Q	153	Q	57-147	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1193693-3 WG1193693-4								
Vinyl chloride	129		118		67-130	9		30
Chloroethane	109		102		50-151	7		30
1,1-Dichloroethene	93		90		65-135	3		30
trans-1,2-Dichloroethene	94		86		70-130	9		30
Trichloroethene	88		82		70-130	7		30
1,2-Dichlorobenzene	90		85		70-130	6		30
1,3-Dichlorobenzene	90		86		70-130	5		30
1,4-Dichlorobenzene	92		85		70-130	8		30
Methyl tert butyl ether	89		85		66-130	5		30
p/m-Xylene	89		84		70-130	6		30
o-Xylene	89		84		70-130	6		30
cis-1,2-Dichloroethene	90		86		70-130	5		30
Dibromomethane	88		85		70-130	3		30
Styrene	86		83		70-130	4		30
Dichlorodifluoromethane	138		129		30-146	7		30
Acetone	90		96		54-140	6		30
Carbon disulfide	80		76		59-130	5		30
2-Butanone	82		94		70-130	14		30
Vinyl acetate	101		105		70-130	4		30
4-Methyl-2-pentanone	102		111		70-130	8		30
1,2,3-Trichloropropane	84		83		68-130	1		30
2-Hexanone	87		95		70-130	9		30
Bromochloromethane	96		95		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1193693-3 WG1193693-4								
2,2-Dichloropropane	89		84		70-130	6		30
1,2-Dibromoethane	93		94		70-130	1		30
1,3-Dichloropropane	87		86		69-130	1		30
1,1,1,2-Tetrachloroethane	97		93		70-130	4		30
Bromobenzene	90		83		70-130	8		30
n-Butylbenzene	89		82		70-130	8		30
sec-Butylbenzene	85		79		70-130	7		30
tert-Butylbenzene	92		84		70-130	9		30
o-Chlorotoluene	85		79		70-130	7		30
p-Chlorotoluene	87		80		70-130	8		30
1,2-Dibromo-3-chloropropane	94		95		68-130	1		30
Hexachlorobutadiene	88		81		67-130	8		30
Isopropylbenzene	84		78		70-130	7		30
p-Isopropyltoluene	93		86		70-130	8		30
Naphthalene	92		91		70-130	1		30
Acrylonitrile	110		113		70-130	3		30
n-Propylbenzene	86		79		70-130	8		30
1,2,3-Trichlorobenzene	88		84		70-130	5		30
1,2,4-Trichlorobenzene	91		85		70-130	7		30
1,3,5-Trimethylbenzene	86		79		70-130	8		30
1,2,4-Trimethylbenzene	86		80		70-130	7		30
1,4-Dioxane	103		105		65-136	2		30
p-Diethylbenzene	92		85		70-130	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1193693-3 WG1193693-4								
p-Ethyltoluene	84		78		70-130	7		30
1,2,4,5-Tetramethylbenzene	88		83		70-130	6		30
Ethyl ether	94		91		67-130	3		30
trans-1,4-Dichloro-2-butene	101		98		70-130	3		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	101		101		70-130
Toluene-d8	102		103		70-130
4-Bromofluorobenzene	98		97		70-130
Dibromofluoromethane	96		93		70-130

SEMIVOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 01:25
 Analyst: ALS
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/02/19 14:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1300		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	64	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	64.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	63.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-01

Date Collected: 12/20/18 12:10

Client ID: RB07_0-2

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	760		ug/kg	110	21.	1
Benzo(a)pyrene	810		ug/kg	150	46.	1
Benzo(b)fluoranthene	1100		ug/kg	110	31.	1
Benzo(k)fluoranthene	430		ug/kg	110	30.	1
Chrysene	840		ug/kg	110	19.	1
Acenaphthylene	460		ug/kg	150	29.	1
Anthracene	180		ug/kg	110	36.	1
Benzo(ghi)perylene	750		ug/kg	150	22.	1
Fluorene	23	J	ug/kg	190	18.	1
Phenanthrene	320		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	150		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	710		ug/kg	150	26.	1
Pyrene	1200		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	22	J	ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	19.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	65	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	73		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 01:01
 Analyst: ALS
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/02/19 14:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	1900		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	120	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-02

Date Collected: 12/20/18 13:30

Client ID: RB07_8-10

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	850		ug/kg	110	21.	1
Benzo(a)pyrene	760		ug/kg	150	46.	1
Benzo(b)fluoranthene	940		ug/kg	110	32.	1
Benzo(k)fluoranthene	350		ug/kg	110	30.	1
Chrysene	790		ug/kg	110	20.	1
Acenaphthylene	95	J	ug/kg	150	29.	1
Anthracene	440		ug/kg	110	37.	1
Benzo(ghi)perylene	500		ug/kg	150	22.	1
Fluorene	150	J	ug/kg	190	18.	1
Phenanthrene	1500		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	110		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	530		ug/kg	150	26.	1
Pyrene	1700		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	100	J	ug/kg	190	18.	1
2-Methylnaphthalene	120	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
Client ID: RB07_8-10
Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
Date Received: 12/20/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	110	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	46		10-136
4-Terphenyl-d14	72		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/27/18 23:32
 Analyst: ALS
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	26	J	ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	520		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	33	J	ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	290		ug/kg	120	23.	1
Benzo(a)pyrene	290		ug/kg	160	49.	1
Benzo(b)fluoranthene	370		ug/kg	120	34.	1
Benzo(k)fluoranthene	130		ug/kg	120	32.	1
Chrysene	270		ug/kg	120	21.	1
Acenaphthylene	34	J	ug/kg	160	31.	1
Anthracene	71	J	ug/kg	120	39.	1
Benzo(ghi)perylene	220		ug/kg	160	24.	1
Fluorene	26	J	ug/kg	200	20.	1
Phenanthrene	330		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	48	J	ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	220		ug/kg	160	28.	1
Pyrene	460		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	21	J	ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	67.	1
2-Nitrophenol	ND		ug/kg	440	76.	1
4-Nitrophenol	ND		ug/kg	280	82.	1
2,4-Dinitrophenol	ND		ug/kg	970	94.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	97.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	32.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	39.	1
Benzoic Acid	ND		ug/kg	660	200	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	34	J	ug/kg	200	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	79		10-136
4-Terphenyl-d14	76		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/26/18 23:10
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 12/23/18 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1192476-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/26/18 23:10
 Analyst: JG

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1192476-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 12/26/18 23:10
 Analyst: JG

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1192476-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	100		10-136
4-Terphenyl-d14	82		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/02/19 13:45
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 01/02/19 10:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1193985-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.
Hexachlorobenzene	ND		ug/kg	100	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	170	16.
1,2-Dichlorobenzene	ND		ug/kg	170	30.
1,3-Dichlorobenzene	ND		ug/kg	170	28.
1,4-Dichlorobenzene	ND		ug/kg	170	29.
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.
2,4-Dinitrotoluene	ND		ug/kg	170	33.
2,6-Dinitrotoluene	ND		ug/kg	170	28.
Fluoranthene	ND		ug/kg	100	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.
4-Bromophenyl phenyl ether	ND		ug/kg	170	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	170	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	170	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	57.
Butyl benzyl phthalate	ND		ug/kg	170	42.
Di-n-butylphthalate	ND		ug/kg	170	31.
Di-n-octylphthalate	ND		ug/kg	170	56.
Diethyl phthalate	ND		ug/kg	170	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/02/19 13:45
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 01/02/19 10:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1193985-1					
Dimethyl phthalate	ND		ug/kg	170	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	170	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	170	30.
2-Nitroaniline	ND		ug/kg	170	32.
3-Nitroaniline	ND		ug/kg	170	31.
4-Nitroaniline	ND		ug/kg	170	69.
Dibenzofuran	ND		ug/kg	170	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	17.
Acetophenone	ND		ug/kg	170	20.
2,4,6-Trichlorophenol	ND		ug/kg	100	31.
p-Chloro-m-cresol	ND		ug/kg	170	25.
2-Chlorophenol	ND		ug/kg	170	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	170	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/02/19 13:45
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 01/02/19 10:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1193985-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	170	25.
2-Methylphenol	ND		ug/kg	170	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	170	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	170	51.
Carbazole	ND		ug/kg	170	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	94		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	93		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1192476-2 WG1192476-3								
Acenaphthene	74		80		31-137	8		50
1,2,4-Trichlorobenzene	69		72		38-107	4		50
Hexachlorobenzene	80		85		40-140	6		50
Bis(2-chloroethyl)ether	68		70		40-140	3		50
2-Chloronaphthalene	74		79		40-140	7		50
1,2-Dichlorobenzene	65		67		40-140	3		50
1,3-Dichlorobenzene	65		66		40-140	2		50
1,4-Dichlorobenzene	64		66		28-104	3		50
3,3'-Dichlorobenzidine	58		59		40-140	2		50
2,4-Dinitrotoluene	88		93		40-132	6		50
2,6-Dinitrotoluene	86		90		40-140	5		50
Fluoranthene	78		84		40-140	7		50
4-Chlorophenyl phenyl ether	72		77		40-140	7		50
4-Bromophenyl phenyl ether	74		81		40-140	9		50
Bis(2-chloroisopropyl)ether	62		65		40-140	5		50
Bis(2-chloroethoxy)methane	73		77		40-117	5		50
Hexachlorobutadiene	67		70		40-140	4		50
Hexachlorocyclopentadiene	56		58		40-140	4		50
Hexachloroethane	70		72		40-140	3		50
Isophorone	79		83		40-140	5		50
Naphthalene	69		72		40-140	4		50
Nitrobenzene	72		74		40-140	3		50
NDPA/DPA	78		83		36-157	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1192476-2 WG1192476-3								
n-Nitrosodi-n-propylamine	74		79		32-121	7		50
Bis(2-ethylhexyl)phthalate	81		86		40-140	6		50
Butyl benzyl phthalate	88		95		40-140	8		50
Di-n-butylphthalate	89		95		40-140	7		50
Di-n-octylphthalate	84		90		40-140	7		50
Diethyl phthalate	82		88		40-140	7		50
Dimethyl phthalate	81		85		40-140	5		50
Benzo(a)anthracene	72		78		40-140	8		50
Benzo(a)pyrene	82		93		40-140	13		50
Benzo(b)fluoranthene	84		90		40-140	7		50
Benzo(k)fluoranthene	80		91		40-140	13		50
Chrysene	77		82		40-140	6		50
Acenaphthylene	79		84		40-140	6		50
Anthracene	78		85		40-140	9		50
Benzo(ghi)perylene	78		88		40-140	12		50
Fluorene	78		83		40-140	6		50
Phenanthrene	72		78		40-140	8		50
Dibenzo(a,h)anthracene	77		87		40-140	12		50
Indeno(1,2,3-cd)pyrene	78		84		40-140	7		50
Pyrene	77		83		35-142	8		50
Biphenyl	78		83		54-104	6		50
4-Chloroaniline	72		75		40-140	4		50
2-Nitroaniline	84		89		47-134	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1192476-2 WG1192476-3								
3-Nitroaniline	55		58		26-129	5		50
4-Nitroaniline	75		80		41-125	6		50
Dibenzofuran	74		80		40-140	8		50
2-Methylnaphthalene	71		75		40-140	5		50
1,2,4,5-Tetrachlorobenzene	75		79		40-117	5		50
Acetophenone	78		82		14-144	5		50
2,4,6-Trichlorophenol	81		86		30-130	6		50
p-Chloro-m-cresol	82		88		26-103	7		50
2-Chlorophenol	73		76		25-102	4		50
2,4-Dichlorophenol	78		82		30-130	5		50
2,4-Dimethylphenol	80		84		30-130	5		50
2-Nitrophenol	78		80		30-130	3		50
4-Nitrophenol	79		84		11-114	6		50
2,4-Dinitrophenol	80		79		4-130	1		50
4,6-Dinitro-o-cresol	82		85		10-130	4		50
Pentachlorophenol	65		67		17-109	3		50
Phenol	66		69		26-90	4		50
2-Methylphenol	75		78		30-130.	4		50
3-Methylphenol/4-Methylphenol	79		84		30-130	6		50
2,4,5-Trichlorophenol	81		84		30-130	4		50
Benzoic Acid	27		53		10-110	65	Q	50
Benzyl Alcohol	78		82		40-140	5		50
Carbazole	77		84		54-128	9		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1192476-2 WG1192476-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	75		77		25-120
Phenol-d6	80		83		10-120
Nitrobenzene-d5	80		83		23-120
2-Fluorobiphenyl	81		84		30-120
2,4,6-Tribromophenol	101		106		10-136
4-Terphenyl-d14	77		82		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1193985-2 WG1193985-3								
Acenaphthene	67		67		31-137	0		50
1,2,4-Trichlorobenzene	79		79		38-107	0		50
Hexachlorobenzene	84		81		40-140	4		50
Bis(2-chloroethyl)ether	69		69		40-140	0		50
2-Chloronaphthalene	82		83		40-140	1		50
1,2-Dichlorobenzene	71		71		40-140	0		50
1,3-Dichlorobenzene	68		69		40-140	1		50
1,4-Dichlorobenzene	70		70		28-104	0		50
3,3'-Dichlorobenzidine	68		71		40-140	4		50
2,4-Dinitrotoluene	70		69		40-132	1		50
2,6-Dinitrotoluene	84		81		40-140	4		50
Fluoranthene	82		82		40-140	0		50
4-Chlorophenyl phenyl ether	73		72		40-140	1		50
4-Bromophenyl phenyl ether	79		77		40-140	3		50
Bis(2-chloroisopropyl)ether	68		68		40-140	0		50
Bis(2-chloroethoxy)methane	73		73		40-117	0		50
Hexachlorobutadiene	81		79		40-140	3		50
Hexachlorocyclopentadiene	43		47		40-140	9		50
Hexachloroethane	65		64		40-140	2		50
Isophorone	74		75		40-140	1		50
Naphthalene	75		75		40-140	0		50
Nitrobenzene	71		70		40-140	1		50
NDPA/DPA	73		73		36-157	0		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1193985-2 WG1193985-3								
n-Nitrosodi-n-propylamine	72		72		32-121	0		50
Bis(2-ethylhexyl)phthalate	78		77		40-140	1		50
Butyl benzyl phthalate	79		78		40-140	1		50
Di-n-butylphthalate	82		81		40-140	1		50
Di-n-octylphthalate	77		76		40-140	1		50
Diethyl phthalate	69		68		40-140	1		50
Dimethyl phthalate	85		83		40-140	2		50
Benzo(a)anthracene	77		75		40-140	3		50
Benzo(a)pyrene	78		78		40-140	0		50
Benzo(b)fluoranthene	76		77		40-140	1		50
Benzo(k)fluoranthene	82		81		40-140	1		50
Chrysene	78		79		40-140	1		50
Acenaphthylene	86		85		40-140	1		50
Anthracene	82		81		40-140	1		50
Benzo(ghi)perylene	76		76		40-140	0		50
Fluorene	74		74		40-140	0		50
Phenanthrene	78		77		40-140	1		50
Dibenzo(a,h)anthracene	77		76		40-140	1		50
Indeno(1,2,3-cd)pyrene	76		75		40-140	1		50
Pyrene	83		82		35-142	1		50
Biphenyl	83		82		54-104	1		50
4-Chloroaniline	35	Q	44		40-140	23		50
2-Nitroaniline	85		85		47-134	0		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1193985-2 WG1193985-3								
3-Nitroaniline	47		52		26-129	10		50
4-Nitroaniline	57		57		41-125	0		50
Dibenzofuran	71		70		40-140	1		50
2-Methylnaphthalene	78		79		40-140	1		50
1,2,4,5-Tetrachlorobenzene	86		86		40-117	0		50
Acetophenone	74		73		14-144	1		50
2,4,6-Trichlorophenol	90		87		30-130	3		50
p-Chloro-m-cresol	84		84		26-103	0		50
2-Chlorophenol	77		76		25-102	1		50
2,4-Dichlorophenol	85		84		30-130	1		50
2,4-Dimethylphenol	83		83		30-130	0		50
2-Nitrophenol	76		76		30-130	0		50
4-Nitrophenol	71		68		11-114	4		50
2,4-Dinitrophenol	41		40		4-130	2		50
4,6-Dinitro-o-cresol	47		48		10-130	2		50
Pentachlorophenol	82		80		17-109	2		50
Phenol	73		74		26-90	1		50
2-Methylphenol	76		76		30-130.	0		50
3-Methylphenol/4-Methylphenol	76		77		30-130	1		50
2,4,5-Trichlorophenol	95		92		30-130	3		50
Benzoic Acid	62		63		10-110	2		50
Benzyl Alcohol	77		79		40-140	3		50
Carbazole	79		78		54-128	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1193985-2 WG1193985-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	71		71		25-120
Phenol-d6	74		76		10-120
Nitrobenzene-d5	71		72		23-120
2-Fluorobiphenyl	82		82		30-120
2,4,6-Tribromophenol	84		85		10-136
4-Terphenyl-d14	83		82		18-120

PCBS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/27/18 16:21
 Analyst: WR
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 18:47
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/26/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/26/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	3.24	1	A
Aroclor 1221	ND		ug/kg	36.4	3.65	1	A
Aroclor 1232	ND		ug/kg	36.4	7.73	1	A
Aroclor 1242	ND		ug/kg	36.4	4.91	1	A
Aroclor 1248	ND		ug/kg	36.4	5.47	1	A
Aroclor 1254	ND		ug/kg	36.4	3.99	1	A
Aroclor 1260	35.9	J	ug/kg	36.4	6.73	1	B
Aroclor 1262	ND		ug/kg	36.4	4.63	1	A
Aroclor 1268	ND		ug/kg	36.4	3.78	1	A
PCBs, Total	35.9	J	ug/kg	36.4	3.24	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/27/18 16:34
 Analyst: WR
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 18:47
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/26/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/26/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.6	3.25	1	A
Aroclor 1221	ND		ug/kg	36.6	3.67	1	A
Aroclor 1232	ND		ug/kg	36.6	7.76	1	A
Aroclor 1242	ND		ug/kg	36.6	4.94	1	A
Aroclor 1248	ND		ug/kg	36.6	5.49	1	A
Aroclor 1254	ND		ug/kg	36.6	4.01	1	A
Aroclor 1260	8.65	J	ug/kg	36.6	6.77	1	A
Aroclor 1262	ND		ug/kg	36.6	4.65	1	A
Aroclor 1268	ND		ug/kg	36.6	3.79	1	A
PCBs, Total	8.65	J	ug/kg	36.6	3.25	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/27/18 16:47
 Analyst: WR
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 18:47
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/26/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/26/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.6	3.43	1	A
Aroclor 1221	ND		ug/kg	38.6	3.87	1	A
Aroclor 1232	ND		ug/kg	38.6	8.19	1	A
Aroclor 1242	ND		ug/kg	38.6	5.21	1	A
Aroclor 1248	ND		ug/kg	38.6	5.79	1	A
Aroclor 1254	ND		ug/kg	38.6	4.22	1	A
Aroclor 1260	ND		ug/kg	38.6	7.14	1	A
Aroclor 1262	ND		ug/kg	38.6	4.90	1	A
Aroclor 1268	ND		ug/kg	38.6	4.00	1	A
PCBs, Total	ND		ug/kg	38.6	3.43	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 12/27/18 15:42
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 12/23/18 18:47
Cleanup Method: EPA 3665A
Cleanup Date: 12/26/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/26/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-03 Batch: WG1192574-1						
Aroclor 1016	ND		ug/kg	32.5	2.88	A
Aroclor 1221	ND		ug/kg	32.5	3.26	A
Aroclor 1232	ND		ug/kg	32.5	6.89	A
Aroclor 1242	ND		ug/kg	32.5	4.38	A
Aroclor 1248	ND		ug/kg	32.5	4.87	A
Aroclor 1254	ND		ug/kg	32.5	3.55	A
Aroclor 1260	ND		ug/kg	32.5	6.00	A
Aroclor 1262	ND		ug/kg	32.5	4.13	A
Aroclor 1268	ND		ug/kg	32.5	3.36	A
PCBs, Total	ND		ug/kg	32.5	2.88	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	75		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1192574-2 WG1192574-3									
Aroclor 1016	58		64		40-140	10		50	A
Aroclor 1260	48		50		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		70		30-150	A
Decachlorobiphenyl	61		61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		76		30-150	B
Decachlorobiphenyl	69		68		30-150	B

PESTICIDES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
Client ID: RB07_0-2
Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
Date Received: 12/20/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 12/28/18 11:45
Analyst: SL
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 12/23/18 17:18
Cleanup Method: EPA 3620B
Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.338	1	A
Lindane	ND		ug/kg	0.720	0.322	1	A
Alpha-BHC	ND		ug/kg	0.720	0.204	1	A
Beta-BHC	ND		ug/kg	1.73	0.655	1	A
Heptachlor	ND		ug/kg	0.863	0.387	1	A
Aldrin	ND		ug/kg	1.73	0.608	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.971	1	A
Endrin	ND		ug/kg	0.720	0.295	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.756	1	A
Endrin ketone	ND		ug/kg	1.73	0.445	1	A
Dieldrin	1.57	IP	ug/kg	1.08	0.540	1	B
4,4'-DDE	12.9		ug/kg	1.73	0.399	1	A
4,4'-DDD	0.913	J	ug/kg	1.73	0.616	1	A
4,4'-DDT	26.9		ug/kg	3.24	1.39	1	B
Endosulfan I	ND		ug/kg	1.73	0.408	1	A
Endosulfan II	ND	I	ug/kg	1.73	0.577	1	A
Endosulfan sulfate	0.392	JIP	ug/kg	0.720	0.342	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.07	1	A
cis-Chlordane	5.02	P	ug/kg	2.16	0.602	1	A
trans-Chlordane	5.13	P	ug/kg	2.16	0.570	1	A
Chlordane	ND		ug/kg	14.0	5.72	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	90		30-150	B
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	62		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/23/18 14:18
 Analyst: KEG
 Percent Solids: 89%
 Methylation Date: 12/22/18 21:00

Extraction Method: EPA 8151A
 Extraction Date: 12/22/18 02:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	185	11.7	1	B
2,4,5-T	ND		ug/kg	185	5.74	1	B
2,4,5-TP (Silvex)	ND		ug/kg	185	4.92	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 11:58
 Analyst: SL
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 17:18
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.80	0.352	1	A
Lindane	ND		ug/kg	0.749	0.335	1	A
Alpha-BHC	ND		ug/kg	0.749	0.213	1	A
Beta-BHC	ND		ug/kg	1.80	0.682	1	A
Heptachlor	ND		ug/kg	0.899	0.403	1	A
Aldrin	ND		ug/kg	1.80	0.633	1	A
Heptachlor epoxide	ND		ug/kg	3.37	1.01	1	A
Endrin	ND		ug/kg	0.749	0.307	1	A
Endrin aldehyde	ND		ug/kg	2.25	0.786	1	A
Endrin ketone	ND		ug/kg	1.80	0.463	1	A
Dieldrin	ND		ug/kg	1.12	0.562	1	A
4,4'-DDE	6.67		ug/kg	1.80	0.416	1	A
4,4'-DDD	ND	IP	ug/kg	1.80	0.641	1	B
4,4'-DDT	16.6		ug/kg	3.37	1.44	1	A
Endosulfan I	ND		ug/kg	1.80	0.425	1	A
Endosulfan II	ND		ug/kg	1.80	0.601	1	A
Endosulfan sulfate	1.20		ug/kg	0.749	0.356	1	A
Methoxychlor	ND		ug/kg	3.37	1.05	1	A
Toxaphene	ND		ug/kg	33.7	9.44	1	A
cis-Chlordane	1.05	JIP	ug/kg	2.25	0.626	1	B
trans-Chlordane	1.29	JIP	ug/kg	2.25	0.593	1	B
Chlordane	ND		ug/kg	14.6	5.96	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	98		30-150	B
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	66		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/23/18 14:37
 Analyst: KEG
 Percent Solids: 86%
 Methylation Date: 12/22/18 21:00

Extraction Method: EPA 8151A
 Extraction Date: 12/22/18 02:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	190	12.0	1	B
2,4,5-T	ND		ug/kg	190	5.89	1	B
2,4,5-TP (Silvex)	ND		ug/kg	190	5.05	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	102		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 12:10
 Analyst: SL
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 17:18
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.93	0.378	1	A
Lindane	ND		ug/kg	0.805	0.360	1	A
Alpha-BHC	ND		ug/kg	0.805	0.229	1	A
Beta-BHC	ND		ug/kg	1.93	0.733	1	A
Heptachlor	ND		ug/kg	0.966	0.433	1	A
Aldrin	ND		ug/kg	1.93	0.680	1	A
Heptachlor epoxide	ND		ug/kg	3.62	1.09	1	A
Endrin	ND		ug/kg	0.805	0.330	1	A
Endrin aldehyde	ND		ug/kg	2.42	0.846	1	A
Endrin ketone	ND		ug/kg	1.93	0.498	1	A
Dieldrin	ND		ug/kg	1.21	0.604	1	A
4,4'-DDE	3.02	P	ug/kg	1.93	0.447	1	A
4,4'-DDD	1.30	JP	ug/kg	1.93	0.689	1	A
4,4'-DDT	4.26	P	ug/kg	3.62	1.55	1	A
Endosulfan I	ND		ug/kg	1.93	0.457	1	A
Endosulfan II	ND		ug/kg	1.93	0.646	1	A
Endosulfan sulfate	0.772	J	ug/kg	0.805	0.383	1	A
Methoxychlor	ND		ug/kg	3.62	1.13	1	A
Toxaphene	ND		ug/kg	36.2	10.1	1	A
cis-Chlordane	ND		ug/kg	2.42	0.673	1	A
trans-Chlordane	0.811	JIP	ug/kg	2.42	0.638	1	B
Chlordane	ND		ug/kg	15.7	6.40	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-03

Date Collected: 12/20/18 13:45

Client ID: RB07_10-12

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/23/18 14:56
 Analyst: KEG
 Percent Solids: 81%
 Methylation Date: 12/22/18 21:00

Extraction Method: EPA 8151A
 Extraction Date: 12/22/18 02:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	205	12.9	1	B
2,4,5-T	ND		ug/kg	205	6.36	1	B
2,4,5-TP (Silvex)	ND		ug/kg	205	5.45	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	105		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 12/23/18 12:44
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/22/18 02:15

Methylation Date: 12/22/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1192311-1						
2,4-D	ND		ug/kg	164	10.3	B
2,4,5-T	ND		ug/kg	164	5.07	B
2,4,5-TP (Silvex)	ND		ug/kg	164	4.35	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	79		30-150	A
DCAA	78		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/28/18 13:05
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 12/23/18 17:18
Cleanup Method: EPA 3620B
Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1192564-1						
Delta-BHC	ND		ug/kg	1.57	0.308	A
Lindane	ND		ug/kg	0.656	0.293	A
Alpha-BHC	ND		ug/kg	0.656	0.186	A
Beta-BHC	ND		ug/kg	1.57	0.597	A
Heptachlor	ND		ug/kg	0.787	0.353	A
Aldrin	ND		ug/kg	1.57	0.554	A
Heptachlor epoxide	ND		ug/kg	2.95	0.886	A
Endrin	ND		ug/kg	0.656	0.269	A
Endrin aldehyde	ND		ug/kg	1.97	0.689	A
Endrin ketone	ND		ug/kg	1.57	0.406	A
Dieldrin	ND		ug/kg	0.984	0.492	A
4,4'-DDE	ND		ug/kg	1.57	0.364	A
4,4'-DDD	ND		ug/kg	1.57	0.562	A
4,4'-DDT	ND		ug/kg	2.95	1.27	A
Endosulfan I	ND		ug/kg	1.57	0.372	A
Endosulfan II	ND		ug/kg	1.57	0.526	A
Endosulfan sulfate	ND		ug/kg	0.656	0.312	A
Methoxychlor	ND		ug/kg	2.95	0.919	A
Toxaphene	ND		ug/kg	29.5	8.27	A
cis-Chlordane	ND		ug/kg	1.97	0.548	A
trans-Chlordane	ND		ug/kg	1.97	0.520	A
Chlordane	ND		ug/kg	12.8	5.22	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 12/28/18 13:05
 Analyst: KEG

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 17:18
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1192564-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	77		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1192311-2 WG1192311-3									
2,4-D	87		96		30-150	10		30	B
2,4,5-T	86		94		30-150	9		30	B
2,4,5-TP (Silvex)	81		88		30-150	8		30	B

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	89		102		30-150	A
DCAA	83		97		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1192564-2 WG1192564-3									
Delta-BHC	85		81		30-150	5		30	A
Lindane	85		81		30-150	5		30	A
Alpha-BHC	88		84		30-150	5		30	A
Beta-BHC	77		77		30-150	0		30	A
Heptachlor	89		83		30-150	7		30	A
Aldrin	82		78		30-150	5		30	A
Heptachlor epoxide	88		84		30-150	5		30	A
Endrin	89		86		30-150	3		30	A
Endrin aldehyde	60		60		30-150	0		30	A
Endrin ketone	82		83		30-150	1		30	A
Dieldrin	93		91		30-150	2		30	A
4,4'-DDE	82		78		30-150	5		30	A
4,4'-DDD	86		83		30-150	4		30	A
4,4'-DDT	88		86		30-150	2		30	A
Endosulfan I	79		75		30-150	5		30	A
Endosulfan II	81		78		30-150	4		30	A
Endosulfan sulfate	64		64		30-150	0		30	A
Methoxychlor	90		89		30-150	1		30	A
cis-Chlordane	68		65		30-150	5		30	A
trans-Chlordane	51		57		30-150	11		30	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1192564-2 WG1192564-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	75		72		30-150	B
Decachlorobiphenyl	77		77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	69		66		30-150	A
Decachlorobiphenyl	80		80		30-150	A



METALS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01

Date Collected: 12/20/18 12:10

Client ID: RB07_0-2

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7260		mg/kg	8.88	2.40	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.44	0.337	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Arsenic, Total	3.39		mg/kg	0.888	0.185	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Barium, Total	468		mg/kg	0.888	0.154	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.444	0.029	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Cadmium, Total	0.506	J	mg/kg	0.888	0.087	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Calcium, Total	36500		mg/kg	8.88	3.11	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Chromium, Total	13.6		mg/kg	0.888	0.085	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Cobalt, Total	7.28		mg/kg	1.78	0.147	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Copper, Total	18.2		mg/kg	0.888	0.229	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Iron, Total	13000		mg/kg	4.44	0.802	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Lead, Total	164		mg/kg	4.44	0.238	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Magnesium, Total	6830		mg/kg	8.88	1.37	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Manganese, Total	301		mg/kg	0.888	0.141	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Mercury, Total	0.150		mg/kg	0.071	0.015	1	12/22/18 04:40	12/26/18 18:27	EPA 7471B	1,7471B	MG
Nickel, Total	14.2		mg/kg	2.22	0.215	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Potassium, Total	3120		mg/kg	222	12.8	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Selenium, Total	0.364	J	mg/kg	1.78	0.229	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.888	0.251	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Sodium, Total	323		mg/kg	178	2.80	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.78	0.280	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Vanadium, Total	23.2		mg/kg	0.888	0.180	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Zinc, Total	221		mg/kg	4.44	0.260	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.90	0.90	1		12/28/18 21:57	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-02

Date Collected: 12/20/18 13:30

Client ID: RB07_8-10

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8070		mg/kg	8.71	2.35	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.35	0.331	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Arsenic, Total	4.87		mg/kg	0.871	0.181	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Barium, Total	456		mg/kg	0.871	0.152	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Beryllium, Total	0.174	J	mg/kg	0.435	0.029	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Cadmium, Total	1.21		mg/kg	0.871	0.085	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Calcium, Total	25200		mg/kg	8.71	3.05	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Chromium, Total	19.1		mg/kg	0.871	0.084	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Cobalt, Total	7.58		mg/kg	1.74	0.144	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Copper, Total	22.0		mg/kg	0.871	0.225	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Iron, Total	14000		mg/kg	4.35	0.786	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Lead, Total	94.0		mg/kg	4.35	0.233	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Magnesium, Total	11700		mg/kg	8.71	1.34	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Manganese, Total	392		mg/kg	0.871	0.138	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Mercury, Total	0.171		mg/kg	0.073	0.015	1	12/22/18 04:40	12/26/18 18:29	EPA 7471B	1,7471B	MG
Nickel, Total	37.0		mg/kg	2.18	0.211	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Potassium, Total	1440		mg/kg	218	12.5	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.74	0.225	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.871	0.246	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Sodium, Total	124	J	mg/kg	174	2.74	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.74	0.274	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Vanadium, Total	27.4		mg/kg	0.871	0.177	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Zinc, Total	293		mg/kg	4.35	0.255	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	19		mg/kg	0.93	0.93	1		12/28/18 22:34	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-03

Date Collected: 12/20/18 13:45

Client ID: RB07_10-12

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3210		mg/kg	9.66	2.61	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Antimony, Total	0.425	J	mg/kg	4.83	0.367	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Arsenic, Total	7.24		mg/kg	0.966	0.201	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Barium, Total	340		mg/kg	0.966	0.168	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Beryllium, Total	0.135	J	mg/kg	0.483	0.032	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Cadmium, Total	1.59		mg/kg	0.966	0.095	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Calcium, Total	14300		mg/kg	9.66	3.38	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Chromium, Total	28.4		mg/kg	0.966	0.093	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Cobalt, Total	4.97		mg/kg	1.93	0.160	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Copper, Total	85.3		mg/kg	0.966	0.249	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Iron, Total	10300		mg/kg	4.83	0.872	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Lead, Total	282		mg/kg	4.83	0.259	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Magnesium, Total	2130		mg/kg	9.66	1.49	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Manganese, Total	128		mg/kg	0.966	0.154	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Mercury, Total	1.83		mg/kg	0.078	0.016	1	12/22/18 04:40	12/26/18 18:30	EPA 7471B	1,7471B	MG
Nickel, Total	23.6		mg/kg	2.42	0.234	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Potassium, Total	545		mg/kg	242	13.9	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Selenium, Total	10.9		mg/kg	1.93	0.249	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.966	0.273	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Sodium, Total	121	J	mg/kg	193	3.04	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.93	0.304	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Vanadium, Total	13.1		mg/kg	0.966	0.196	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Zinc, Total	321		mg/kg	4.83	0.283	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	28		mg/kg	0.99	0.99	1		12/28/18 22:38	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1192315-1										
Mercury, Total	0.019	J	mg/kg	0.083	0.018	1	12/22/18 04:40	12/26/18 14:09	1,7471B	MG

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1192853-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Antimony, Total	ND		mg/kg	2.00	0.152	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Barium, Total	ND		mg/kg	0.400	0.070	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Calcium, Total	ND		mg/kg	4.00	1.40	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Chromium, Total	ND		mg/kg	0.400	0.038	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Copper, Total	ND		mg/kg	0.400	0.103	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Iron, Total	0.428	J	mg/kg	2.00	0.361	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Lead, Total	ND		mg/kg	2.00	0.107	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Manganese, Total	ND		mg/kg	0.400	0.064	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Nickel, Total	ND		mg/kg	1.00	0.097	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Potassium, Total	ND		mg/kg	100	5.76	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Selenium, Total	ND		mg/kg	0.800	0.103	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Silver, Total	ND		mg/kg	0.400	0.113	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Sodium, Total	ND		mg/kg	80.0	1.26	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Thallium, Total	ND		mg/kg	0.800	0.126	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Zinc, Total	ND		mg/kg	2.00	0.117	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1192315-2 SRM Lot Number: D102-540								
Mercury, Total	95		-		65-134	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1192853-2 SRM Lot Number: D102-540					
Aluminum, Total	72	-	49-150	-	
Antimony, Total	148	-	1-199	-	
Arsenic, Total	100	-	83-117	-	
Barium, Total	96	-	83-118	-	
Beryllium, Total	96	-	83-116	-	
Cadmium, Total	94	-	83-118	-	
Calcium, Total	97	-	82-118	-	
Chromium, Total	94	-	83-117	-	
Cobalt, Total	94	-	84-116	-	
Copper, Total	91	-	84-116	-	
Iron, Total	97	-	61-139	-	
Lead, Total	95	-	82-118	-	
Magnesium, Total	83	-	76-124	-	
Manganese, Total	93	-	82-118	-	
Nickel, Total	94	-	83-117	-	
Potassium, Total	86	-	70-130	-	
Selenium, Total	96	-	79-121	-	
Silver, Total	96	-	80-120	-	
Sodium, Total	98	-	74-126	-	
Thallium, Total	95	-	81-119	-	
Vanadium, Total	93	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1192853-2 SRM Lot Number: D102-540					
Zinc, Total	93	-	81-118	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

<u>Parameter</u>	<u>Native Sample</u>	<u>MS Added</u>	<u>MS Found</u>	<u>MS %Recovery</u>	<u>Qual</u>	<u>MSD Found</u>	<u>MSD %Recovery</u>	<u>Qual</u>	<u>Recovery Limits</u>	<u>RPD</u>	<u>Qual</u>	<u>RPD Limits</u>
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192315-3 QC Sample: L1849633-01 Client ID: MS Sample												
Mercury, Total	ND	0.148	0.170	115		-	-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192853-3 QC Sample: L1852610-01 Client ID: RB07_0-2									
Aluminum, Total	7260	175	7400	80	-	-	75-125	-	20
Antimony, Total	ND	43.7	33.1	76	-	-	75-125	-	20
Arsenic, Total	3.39	10.5	13.8	99	-	-	75-125	-	20
Barium, Total	468	175	500	18	Q	-	75-125	-	20
Beryllium, Total	ND	4.37	4.04	92	-	-	75-125	-	20
Cadmium, Total	0.506J	4.46	4.57	102	-	-	75-125	-	20
Calcium, Total	36500	874	48600	1380	Q	-	75-125	-	20
Chromium, Total	13.6	17.5	29.7	92	-	-	75-125	-	20
Cobalt, Total	7.28	43.7	44.6	85	-	-	75-125	-	20
Copper, Total	18.2	21.8	35.8	80	-	-	75-125	-	20
Iron, Total	13000	87.4	13600	686	Q	-	75-125	-	20
Lead, Total	164	44.6	169	11	Q	-	75-125	-	20
Magnesium, Total	6830	874	7940	127	Q	-	75-125	-	20
Manganese, Total	301	43.7	384	190	Q	-	75-125	-	20
Nickel, Total	14.2	43.7	51.5	85	-	-	75-125	-	20
Potassium, Total	3120	874	4110	113	-	-	75-125	-	20
Selenium, Total	0.364J	10.5	9.79	93	-	-	75-125	-	20
Silver, Total	ND	26.2	26.7	102	-	-	75-125	-	20
Sodium, Total	323	874	1100	89	-	-	75-125	-	20
Thallium, Total	ND	10.5	8.17	78	-	-	75-125	-	20
Vanadium, Total	23.2	43.7	62.4	90	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192853-3 QC Sample: L1852610-01 Client ID: RB07_0-2									
Zinc, Total	221	43.7	255	78	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192315-4 QC Sample: L1849633-01 Client ID: DUP Sample						
Mercury, Total	ND	0.020J	mg/kg	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192853-4 QC Sample: L1852610-01 Client ID: RB07_0-2					
Aluminum, Total	7260	8010	mg/kg	10	20
Antimony, Total	ND	ND	mg/kg	NC	20
Arsenic, Total	3.39	3.95	mg/kg	15	20
Barium, Total	468	471	mg/kg	1	20
Beryllium, Total	ND	ND	mg/kg	NC	20
Cadmium, Total	0.506J	0.727J	mg/kg	NC	20
Calcium, Total	36500	38100	mg/kg	4	20
Chromium, Total	13.6	14.8	mg/kg	8	20
Cobalt, Total	7.28	7.97	mg/kg	9	20
Copper, Total	18.2	17.2	mg/kg	6	20
Iron, Total	13000	13300	mg/kg	2	20
Lead, Total	164	181	mg/kg	10	20
Magnesium, Total	6830	7090	mg/kg	4	20
Manganese, Total	301	292	mg/kg	3	20
Nickel, Total	14.2	15.1	mg/kg	6	20
Potassium, Total	3120	3660	mg/kg	16	20
Selenium, Total	0.364J	0.522J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	323	394	mg/kg	20	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192853-4 QC Sample: L1852610-01 Client ID: RB07_0-2					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	23.2	24.1	mg/kg	4	20
Zinc, Total	221	293	mg/kg	28 Q	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01

Date Collected: 12/20/18 12:10

Client ID: RB07_0-2

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.8		%	0.100	NA	1	-	12/21/18 12:56	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/22/18 12:55	12/26/18 14:35	1,9010C/9012B	LH
Chromium, Hexavalent	1.54		mg/kg	0.901	0.180	1	12/22/18 23:30	12/26/18 21:15	1,7196A	CW



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02

Date Collected: 12/20/18 13:30

Client ID: RB07_8-10

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	12/21/18 12:56	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/22/18 12:55	12/26/18 14:38	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.926	0.185	1	12/22/18 23:30	12/26/18 21:15	1,7196A	CW



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03

Date Collected: 12/20/18 13:45

Client ID: RB07_10-12

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.0		%	0.100	NA	1	-	12/21/18 12:56	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/22/18 12:55	12/26/18 14:39	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.988	0.198	1	12/22/18 23:30	12/26/18 21:15	1,7196A	CW



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1192409-1										
Cyanide, Total	ND		mg/kg	0.92	0.20	1	12/22/18 12:55	12/26/18 14:12	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1192485-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	12/22/18 23:30	12/26/18 21:15	1,7196A	CW

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1192409-2 WG1192409-3								
Cyanide, Total	71	Q	77	Q	80-120	6		35
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1192485-2								
Chromium, Hexavalent	83		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1192409-4 WG1192409-5 QC Sample: L1852610-01 Client ID: RB07_0-2												
Cyanide, Total	ND	10	8.4	82		10	90		75-125	17		35
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1192485-4 QC Sample: L1852610-01 Client ID: RB07_0-2												
Chromium, Hexavalent	1.54	751	783	104		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1192128-1 QC Sample: L1852646-01 Client ID: DUP Sample						
Solids, Total	93.3	94.0	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1192485-6 QC Sample: L1852610-01 Client ID: RB07_0-2						
Chromium, Hexavalent	1.54	ND	mg/kg	NC		20

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852610-01A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1852610-01B	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-01C	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-01D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1852610-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852610-01F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-01G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-02A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1852610-02B	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-02C	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-02D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1852610-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852610-02F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-02G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-03A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852610-03B	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-03C	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-03D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1852610-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852610-03F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-03G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Container Comments

L1852610-01A WM: sample broken 12/22/18 00:10 when being placed in custody fridge

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #								
		of	12/20/18	11852610									
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #							
Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:							
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.		ANALYSIS				Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)							
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total Bottles
		Date	Time										
52610-01	RB07_0-2	12/20/18	12:16 pm	Soil	JS	X	X	X	X	X	X	X	
-02	RB07_8-10	↓	13:30	↓	JS	X	X	X	X	X	X	X	
-03	RB07_10-12	↓	17:45	↓	JA	X	X	X	X	X	X	X	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)			
Relinquished By: <i>[Signature]</i>		Date/Time: 12-20-18 14:12		Received By: <i>[Signature]</i>		Date/Time: 12-20-18 14:12		Relinquished By: <i>[Signature]</i>		Date/Time: 12-20-18 19:00			
Relinquished By: <i>[Signature]</i>		Date/Time: 12-20-18 15:00		Received By: <i>[Signature]</i>		Date/Time: 12/20/18 1900		Relinquished By: <i>[Signature]</i>		Date/Time: 12/20/18 2325			



ANALYTICAL REPORT

Lab Number:	L1852926
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE + E. 146TH ST.
Project Number:	170487001
Report Date:	01/04/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1852926-01	RB05_0-2	SOIL	BRONX, NY	12/21/18 09:35	12/21/18
L1852926-02	RB05_8-10	SOIL	BRONX, NY	12/21/18 09:40	12/21/18
L1852926-03	RB05_13-15	SOIL	BRONX, NY	12/21/18 09:50	12/21/18
L1852926-04	RB05_19-21	SOIL	BRONX, NY	12/21/18 10:00	12/21/18
L1852926-05	RB06_0-2	SOIL	BRONX, NY	12/21/18 12:30	12/21/18
L1852926-06	RB06_8-10	SOIL	BRONX, NY	12/21/18 12:40	12/21/18
L1852926-07	RB06_10-12	SOIL	BRONX, NY	12/21/18 12:50	12/21/18
L1852926-08	RB04_0-2	SOIL	BRONX, NY	12/21/18 13:30	12/21/18
L1852926-09	RB04_8-10	SOIL	BRONX, NY	12/21/18 13:40	12/21/18
L1852926-10	RB04_13-15	SOIL	BRONX, NY	12/21/18 13:50	12/21/18
L1852926-11	SODUP01_122118	SOIL	BRONX, NY	12/21/18 00:00	12/21/18
L1852926-12	SOTB01_122118	WATER	BRONX, NY	12/21/18 00:00	12/21/18
L1852926-13	SOFB01_122118	WATER	BRONX, NY	12/21/18 14:45	12/21/18
L1852926-14	RB04_18-20	SOIL	BRONX, NY	12/21/18 14:00	12/21/18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Pesticides

L1852926-03, -04, -10, and -14: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1852926-03, -04, -10, and -14: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

L1852926-06: The sample has elevated detection limits due to limited sample volume available for analysis.

L1852926-13: The surrogate recoveries were outside the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (17%) and decachlorobiphenyl (13%); however, the criteria were achieved upon re-extraction outside of holding time. The results of both extractions are reported.

Herbicides

The surrogate recoveries for the WG1192478-1 Method Blank, associated with L1852926-01 through -11, and -14, are below the acceptance criteria for dcaa (0%). The associated samples are non-detect and have acceptable surrogate recoveries or surrogates that fail high; therefore, no further actions were taken.

Total Metals

L1852926-01 through -11 and -14: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1193229-3 MS recoveries for aluminum (23%), calcium (988%), iron (0%), lead (1700%), magnesium (72%), manganese (163%) and zinc (474%), performed on L1852926-01, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG1193229-3 MS recovery, performed on L1852926-01, is outside the acceptance criteria for barium (320%). A post digestion spike was performed and was within acceptance criteria.

Project Name: GERARD AVE + E. 146TH ST.
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Lab Number: L1852926
Report Date: 01/04/19

Case Narrative (continued)

The WG1193229-4 Laboratory Duplicate RPD for iron (22%), performed on L1852926-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

Cyanide, Total

The WG1192428-2/-3 LCS/LCSD recoveries (73%/78%), associated with L1852926-01 through -08, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1192704-3 LCSD recovery (72%), associated with L1852926-09,-10,-11, and -14, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Hexavalent Chromium

The WG1192810-4 Insoluble MS recovery (0%), performed on L1852926-10, is below the acceptance criteria. The Soluble MS recovery (0%) was also below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 104%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/04/19

ORGANICS

VOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 08:38
 Analyst: JC
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.5	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	1.9		ug/kg	0.55	0.21	1
Chlorobenzene	ND		ug/kg	0.55	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.76	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.55	0.18	1
Bromodichloromethane	ND		ug/kg	0.55	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.55	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.55	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.55	0.17	1
Bromoform	ND		ug/kg	4.4	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.55	0.18	1
Benzene	ND		ug/kg	0.55	0.18	1
Toluene	ND		ug/kg	1.1	0.60	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.4	1.0	1
Bromomethane	ND		ug/kg	2.2	0.64	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
Chloroethane	ND		ug/kg	2.2	0.50	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.55	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.3	1
Carbon disulfide	ND		ug/kg	11	5.0	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.55	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.71	1
Acrylonitrile	ND		ug/kg	4.4	1.3	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
Client ID: RB05_0-2
Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.5	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 17:19
 Analyst: AD
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.7	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.94	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.94	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.94	0.12	1
Dibromochloromethane	ND		ug/kg	0.94	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.94	0.25	1
Tetrachloroethene	0.32	J	ug/kg	0.47	0.18	1
Chlorobenzene	ND		ug/kg	0.47	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.65	1
1,2-Dichloroethane	ND		ug/kg	0.94	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.47	0.16	1
Bromodichloromethane	ND		ug/kg	0.47	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.94	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.47	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.47	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.47	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.47	0.16	1
Benzene	0.17	J	ug/kg	0.47	0.16	1
Toluene	ND		ug/kg	0.94	0.51	1
Ethylbenzene	ND		ug/kg	0.94	0.13	1
Chloromethane	ND		ug/kg	3.8	0.88	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.94	0.32	1
Chloroethane	ND		ug/kg	1.9	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.94	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-02

Date Collected: 12/21/18 09:40

Client ID: RB05_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.47	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.94	0.27	1
Xylenes, Total	ND		ug/kg	0.94	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.94	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.94	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.22	1
Styrene	ND		ug/kg	0.94	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.4	0.86	1
Acetone	ND		ug/kg	9.4	4.5	1
Carbon disulfide	ND		ug/kg	9.4	4.3	1
2-Butanone	ND		ug/kg	9.4	2.1	1
Vinyl acetate	ND		ug/kg	9.4	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.4	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.4	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.94	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.47	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.94	0.16	1
sec-Butylbenzene	ND		ug/kg	0.94	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.94	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.94	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.94	0.10	1
Naphthalene	ND		ug/kg	3.8	0.61	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
Client ID: RB05_8-10
Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.94	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.31	1
1,4-Dioxane	ND		ug/kg	94	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.7	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 17:44
 Analyst: AD
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.4	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.88	0.13	1
Chloroform	ND		ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.88	0.20	1
1,2-Dichloropropane	ND		ug/kg	0.88	0.11	1
Dibromochloromethane	ND		ug/kg	0.88	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.88	0.23	1
Tetrachloroethene	0.42	J	ug/kg	0.44	0.17	1
Chlorobenzene	ND		ug/kg	0.44	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.5	0.61	1
1,2-Dichloroethane	ND		ug/kg	0.88	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.44	0.15	1
Bromodichloromethane	ND		ug/kg	0.44	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.88	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.44	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.44	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.44	0.14	1
Bromoform	ND		ug/kg	3.5	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.44	0.14	1
Benzene	0.14	J	ug/kg	0.44	0.14	1
Toluene	ND		ug/kg	0.88	0.48	1
Ethylbenzene	0.23	J	ug/kg	0.88	0.12	1
Chloromethane	ND		ug/kg	3.5	0.82	1
Bromomethane	ND		ug/kg	1.8	0.51	1
Vinyl chloride	ND		ug/kg	0.88	0.29	1
Chloroethane	ND		ug/kg	1.8	0.40	1
1,1-Dichloroethene	ND		ug/kg	0.88	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-03

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.44	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	0.88	J	ug/kg	1.8	0.49	1
o-Xylene	0.40	J	ug/kg	0.88	0.26	1
Xylenes, Total	1.3	J	ug/kg	0.88	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.88	0.15	1
1,2-Dichloroethene, Total	ND		ug/kg	0.88	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.21	1
Styrene	ND		ug/kg	0.88	0.17	1
Dichlorodifluoromethane	ND		ug/kg	8.8	0.80	1
Acetone	4.6	J	ug/kg	8.8	4.2	1
Carbon disulfide	ND		ug/kg	8.8	4.0	1
2-Butanone	ND		ug/kg	8.8	1.9	1
Vinyl acetate	ND		ug/kg	8.8	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	8.8	1.1	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.11	1
2-Hexanone	ND		ug/kg	8.8	1.0	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.88	0.24	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.44	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.88	0.15	1
sec-Butylbenzene	ND		ug/kg	0.88	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.10	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	0.88	1
Hexachlorobutadiene	ND		ug/kg	3.5	0.15	1
Isopropylbenzene	ND		ug/kg	0.88	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.88	0.10	1
Naphthalene	ND		ug/kg	3.5	0.57	1
Acrylonitrile	ND		ug/kg	3.5	1.0	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
Client ID: RB05_13-15
Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.88	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.28	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.29	1
1,4-Dioxane	ND		ug/kg	88	31.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.34	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.4	1.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
 Client ID: RB05_19-21
 Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 18:10
 Analyst: AD
 Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.72	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.17	1
Bromodichloromethane	ND		ug/kg	0.52	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.52	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.52	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.52	0.16	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.56	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.97	1
Bromomethane	ND		ug/kg	2.1	0.60	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.47	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-04

Date Collected: 12/21/18 10:00

Client ID: RB05_19-21

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.58	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.95	1
Acetone	23		ug/kg	10	5.0	1
Carbon disulfide	ND		ug/kg	10	4.7	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.52	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.2	0.18	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.2	0.68	1
Acrylonitrile	ND		ug/kg	4.2	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
Client ID: RB05_19-21
Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	100	36.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.18	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 19:02
 Analyst: AD
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	0.74		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-05

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.99	1
Acetone	ND		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
Client ID: RB06_0-2
Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 20:45
 Analyst: AD
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	0.67		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.74	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.58	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.1	0.62	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.1	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-06

Date Collected: 12/21/18 12:40

Client ID: RB06_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.22	1
p/m-Xylene	ND		ug/kg	2.1	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.1	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.98	1
Acetone	18		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.1	0.13	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
Client ID: RB06_8-10
Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.19	1
p-Ethyltoluene	ND		ug/kg	2.1	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.36	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	88		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 21:11
 Analyst: AD
 Percent Solids: 69%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.7	3.5	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.22	1
Chloroform	ND		ug/kg	2.3	0.22	1
Carbon tetrachloride	ND		ug/kg	1.5	0.35	1
1,2-Dichloropropane	ND		ug/kg	1.5	0.19	1
Dibromochloromethane	ND		ug/kg	1.5	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.41	1
Tetrachloroethene	ND		ug/kg	0.77	0.30	1
Chlorobenzene	ND		ug/kg	0.77	0.20	1
Trichlorofluoromethane	ND		ug/kg	6.2	1.1	1
1,2-Dichloroethane	ND		ug/kg	1.5	0.40	1
1,1,1-Trichloroethane	ND		ug/kg	0.77	0.26	1
Bromodichloromethane	ND		ug/kg	0.77	0.17	1
trans-1,3-Dichloropropene	ND		ug/kg	1.5	0.42	1
cis-1,3-Dichloropropene	ND		ug/kg	0.77	0.24	1
1,3-Dichloropropene, Total	ND		ug/kg	0.77	0.24	1
1,1-Dichloropropene	ND		ug/kg	0.77	0.24	1
Bromoform	ND		ug/kg	6.2	0.38	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.77	0.26	1
Benzene	0.38	J	ug/kg	0.77	0.26	1
Toluene	ND		ug/kg	1.5	0.84	1
Ethylbenzene	ND		ug/kg	1.5	0.22	1
Chloromethane	ND		ug/kg	6.2	1.4	1
Bromomethane	ND		ug/kg	3.1	0.90	1
Vinyl chloride	ND		ug/kg	1.5	0.52	1
Chloroethane	ND		ug/kg	3.1	0.70	1
1,1-Dichloroethene	ND		ug/kg	1.5	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	2.3	0.21	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-07

Date Collected: 12/21/18 12:50

Client ID: RB06_10-12

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.77	0.21	1
1,2-Dichlorobenzene	ND		ug/kg	3.1	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	3.1	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	3.1	0.26	1
Methyl tert butyl ether	ND		ug/kg	3.1	0.31	1
p/m-Xylene	ND		ug/kg	3.1	0.86	1
o-Xylene	ND		ug/kg	1.5	0.45	1
Xylenes, Total	ND		ug/kg	1.5	0.45	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	0.27	1
1,2-Dichloroethene, Total	ND		ug/kg	1.5	0.21	1
Dibromomethane	ND		ug/kg	3.1	0.37	1
Styrene	ND		ug/kg	1.5	0.30	1
Dichlorodifluoromethane	ND		ug/kg	15	1.4	1
Acetone	26		ug/kg	15	7.4	1
Carbon disulfide	11	J	ug/kg	15	7.0	1
2-Butanone	ND		ug/kg	15	3.4	1
Vinyl acetate	ND		ug/kg	15	3.3	1
4-Methyl-2-pentanone	ND		ug/kg	15	2.0	1
1,2,3-Trichloropropane	ND		ug/kg	3.1	0.20	1
2-Hexanone	ND		ug/kg	15	1.8	1
Bromochloromethane	ND		ug/kg	3.1	0.32	1
2,2-Dichloropropane	ND		ug/kg	3.1	0.31	1
1,2-Dibromoethane	ND		ug/kg	1.5	0.43	1
1,3-Dichloropropane	ND		ug/kg	3.1	0.26	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.77	0.20	1
Bromobenzene	ND		ug/kg	3.1	0.22	1
n-Butylbenzene	ND		ug/kg	1.5	0.26	1
sec-Butylbenzene	ND		ug/kg	1.5	0.22	1
tert-Butylbenzene	ND		ug/kg	3.1	0.18	1
o-Chlorotoluene	ND		ug/kg	3.1	0.29	1
p-Chlorotoluene	ND		ug/kg	3.1	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.6	1.5	1
Hexachlorobutadiene	ND		ug/kg	6.2	0.26	1
Isopropylbenzene	ND		ug/kg	1.5	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.5	0.17	1
Naphthalene	ND		ug/kg	6.2	1.0	1
Acrylonitrile	ND		ug/kg	6.2	1.8	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.5	0.26	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.1	0.50	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.1	0.42	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.1	0.30	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.1	0.51	1
1,4-Dioxane	ND		ug/kg	150	54.	1
p-Diethylbenzene	ND		ug/kg	3.1	0.27	1
p-Ethyltoluene	ND		ug/kg	3.1	0.59	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.1	0.29	1
Ethyl ether	ND		ug/kg	3.1	0.52	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.7	2.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 22:03
 Analyst: MV
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.1	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	2.2		ug/kg	0.61	0.24	1
Chlorobenzene	ND		ug/kg	0.61	0.16	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.85	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	0.20	1
Bromodichloromethane	ND		ug/kg	0.61	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.61	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.61	0.20	1
Bromoform	ND		ug/kg	4.9	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	0.20	1
Benzene	ND		ug/kg	0.61	0.20	1
Toluene	ND		ug/kg	1.2	0.67	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.9	1.1	1
Bromomethane	ND		ug/kg	2.4	0.71	1
Vinyl chloride	ND		ug/kg	1.2	0.41	1
Chloroethane	ND		ug/kg	2.4	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-08

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.61	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.25	1
p/m-Xylene	ND		ug/kg	2.4	0.69	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.9	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.16	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.61	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.9	0.80	1
Acrylonitrile	ND		ug/kg	4.9	1.4	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
Client ID: RB04_0-2
Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.41	1
1,4-Dioxane	ND		ug/kg	120	43.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.22	1
p-Ethyltoluene	ND		ug/kg	2.4	0.47	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.42	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.1	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 22:29
 Analyst: MV
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.6	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.93	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.93	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.93	0.12	1
Dibromochloromethane	ND		ug/kg	0.93	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.93	0.25	1
Tetrachloroethene	ND		ug/kg	0.46	0.18	1
Chlorobenzene	ND		ug/kg	0.46	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.65	1
1,2-Dichloroethane	ND		ug/kg	0.93	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.16	1
Bromodichloromethane	ND		ug/kg	0.46	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.93	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.46	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.46	0.15	1
Bromoform	ND		ug/kg	3.7	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1
Benzene	ND		ug/kg	0.46	0.15	1
Toluene	ND		ug/kg	0.93	0.50	1
Ethylbenzene	ND		ug/kg	0.93	0.13	1
Chloromethane	ND		ug/kg	3.7	0.87	1
Bromomethane	ND		ug/kg	1.9	0.54	1
Vinyl chloride	ND		ug/kg	0.93	0.31	1
Chloroethane	ND		ug/kg	1.9	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.93	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09

Date Collected: 12/21/18 13:40

Client ID: RB04_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.46	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.52	1
o-Xylene	ND		ug/kg	0.93	0.27	1
Xylenes, Total	ND		ug/kg	0.93	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.93	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.93	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.22	1
Styrene	ND		ug/kg	0.93	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.3	0.85	1
Acetone	ND		ug/kg	9.3	4.5	1
Carbon disulfide	ND		ug/kg	9.3	4.2	1
2-Butanone	ND		ug/kg	9.3	2.1	1
Vinyl acetate	ND		ug/kg	9.3	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.3	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.3	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.93	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.46	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.93	0.16	1
sec-Butylbenzene	ND		ug/kg	0.93	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.93	1
Hexachlorobutadiene	ND		ug/kg	3.7	0.16	1
Isopropylbenzene	ND		ug/kg	0.93	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.93	0.10	1
Naphthalene	ND		ug/kg	3.7	0.60	1
Acrylonitrile	ND		ug/kg	3.7	1.1	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.93	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.31	1
1,4-Dioxane	ND		ug/kg	93	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.16	1
p-Ethyltoluene	ND		ug/kg	1.9	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.6	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 22:55
 Analyst: MV
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.58	0.23	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.81	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.20	1
Bromodichloromethane	ND		ug/kg	0.58	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.63	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.3	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-10

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.65	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	24		ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.7	0.76	1
Acrylonitrile	ND		ug/kg	4.7	1.3	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.39	1
1,4-Dioxane	ND		ug/kg	120	41.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.21	1
p-Ethyltoluene	ND		ug/kg	2.3	0.45	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 13:15
 Analyst: NLK
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	0.50		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.94	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	100	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-12
 Client ID: SOTB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 16:45
 Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-12
 Client ID: SOTB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-12
 Client ID: SOTB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 17:15
 Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 09:06
 Analyst: JC
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.8	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.36	1
Tetrachloroethene	ND		ug/kg	0.68	0.27	1
Chlorobenzene	ND		ug/kg	0.68	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.95	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.68	0.23	1
Bromodichloromethane	ND		ug/kg	0.68	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.68	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.68	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.68	0.22	1
Bromoform	ND		ug/kg	5.5	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.68	0.23	1
Benzene	0.36	J	ug/kg	0.68	0.23	1
Toluene	ND		ug/kg	1.4	0.74	1
Ethylbenzene	1.6		ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.5	1.3	1
Bromomethane	ND		ug/kg	2.7	0.79	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.7	0.62	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.19	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-14

Date Collected: 12/21/18 14:00

Client ID: RB04_18-20

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.68	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.76	1
o-Xylene	0.62	J	ug/kg	1.4	0.40	1
Xylenes, Total	0.62	J	ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.7	0.32	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	52		ug/kg	14	6.6	1
Carbon disulfide	ND		ug/kg	14	6.2	1
2-Butanone	11	J	ug/kg	14	3.0	1
Vinyl acetate	ND		ug/kg	14	2.9	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.7	0.17	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
2,2-Dichloropropane	ND		ug/kg	2.7	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
1,3-Dichloropropane	ND		ug/kg	2.7	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.68	0.18	1
Bromobenzene	ND		ug/kg	2.7	0.20	1
n-Butylbenzene	0.23	J	ug/kg	1.4	0.23	1
sec-Butylbenzene	0.28	J	ug/kg	1.4	0.20	1
tert-Butylbenzene	0.19	J	ug/kg	2.7	0.16	1
o-Chlorotoluene	ND		ug/kg	2.7	0.26	1
p-Chlorotoluene	ND		ug/kg	2.7	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.5	0.23	1
Isopropylbenzene	0.78	J	ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	120		ug/kg	5.5	0.89	1
Acrylonitrile	ND		ug/kg	5.5	1.6	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
Client ID: RB04_18-20
Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.43	J	ug/kg	1.4	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.37	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	2.9		ug/kg	2.7	0.46	1
1,4-Dioxane	ND		ug/kg	140	48.	1
p-Diethylbenzene	0.42	J	ug/kg	2.7	0.24	1
p-Ethyltoluene	ND		ug/kg	2.7	0.52	1
1,2,4,5-Tetramethylbenzene	1.7	J	ug/kg	2.7	0.26	1
Ethyl ether	ND		ug/kg	2.7	0.46	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.8	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 09:56
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12-13 Batch: WG1194042-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 09:56
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12-13 Batch: WG1194042-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 09:56
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12-13 Batch: WG1194042-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 14:17
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02-10 Batch: WG1194240-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 14:17
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02-10 Batch: WG1194240-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/02/19 14:17
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02-10 Batch: WG1194240-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 08:10
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,11,14 Batch: WG1194326-10					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 08:10
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,11,14 Batch: WG1194326-10					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 08:10
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,11,14 Batch: WG1194326-10					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	103		70-130



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12-13 Batch: WG1194042-3 WG1194042-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	100		110		63-132	10		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	100		110		63-130	10		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		110		75-130	10		20
Trichlorofluoromethane	100		110		62-150	10		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	100		110		70-130	10		20
cis-1,3-Dichloropropene	100		110		70-130	10		20
1,1-Dichloropropene	100		110		70-130	10		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	100		110		70-130	10		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	90		92		64-130	2		20
Bromomethane	48		50		39-139	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12-13 Batch: WG1194042-3 WG1194042-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	100		110		55-138	10		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Trichloroethene	100		110		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	99		100		70-130	1		20
Methyl tert butyl ether	100		110		63-130	10		20
p/m-Xylene	100		110		70-130	10		20
o-Xylene	100		110		70-130	10		20
cis-1,2-Dichloroethene	100		110		70-130	10		20
Dibromomethane	100		110		70-130	10		20
1,2,3-Trichloropropane	110		120		64-130	9		20
Acrylonitrile	97		110		70-130	13		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	130		130		58-148	0		20
Carbon disulfide	100		110		51-130	10		20
2-Butanone	83		84		63-138	1		20
Vinyl acetate	110		120		70-130	9		20
4-Methyl-2-pentanone	96		100		59-130	4		20
2-Hexanone	98		110		57-130	12		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12-13 Batch: WG1194042-3 WG1194042-4								
Bromochloromethane	110		120		70-130	9		20
2,2-Dichloropropane	100		110		63-133	10		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	100		110		70-130	10		20
tert-Butylbenzene	100		110		70-130	10		20
o-Chlorotoluene	93		97		70-130	4		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	94		100		41-144	6		20
Hexachlorobutadiene	110		110		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	96		100		70-130	4		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	98		100		70-130	2		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	128		126		56-162	2		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12-13 Batch: WG1194042-3 WG1194042-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	110		110		59-134	0		20
trans-1,4-Dichloro-2-butene	94		97		70-130	3		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	108		109		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	104		101		70-130
Dibromofluoromethane	103		104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02-10 Batch: WG1194240-3 WG1194240-4								
Methylene chloride	84		81		70-130	4		30
1,1-Dichloroethane	87		83		70-130	5		30
Chloroform	91		88		70-130	3		30
Carbon tetrachloride	92		87		70-130	6		30
1,2-Dichloropropane	82		81		70-130	1		30
Dibromochloromethane	84		82		70-130	2		30
1,1,2-Trichloroethane	86		86		70-130	0		30
Tetrachloroethene	92		90		70-130	2		30
Chlorobenzene	85		83		70-130	2		30
Trichlorofluoromethane	112		106		70-139	6		30
1,2-Dichloroethane	83		82		70-130	1		30
1,1,1-Trichloroethane	93		87		70-130	7		30
Bromodichloromethane	84		83		70-130	1		30
trans-1,3-Dichloropropene	86		84		70-130	2		30
cis-1,3-Dichloropropene	84		83		70-130	1		30
1,1-Dichloropropene	93		90		70-130	3		30
Bromoform	84		84		70-130	0		30
1,1,2,2-Tetrachloroethane	81		81		70-130	0		30
Benzene	87		84		70-130	4		30
Toluene	86		82		70-130	5		30
Ethylbenzene	83		80		70-130	4		30
Chloromethane	92		82		52-130	11		30
Bromomethane	105		100		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02-10 Batch: WG1194240-3 WG1194240-4								
Vinyl chloride	106		97		67-130	9		30
Chloroethane	113		105		50-151	7		30
1,1-Dichloroethene	92		87		65-135	6		30
trans-1,2-Dichloroethene	90		84		70-130	7		30
Trichloroethene	87		86		70-130	1		30
1,2-Dichlorobenzene	83		84		70-130	1		30
1,3-Dichlorobenzene	86		86		70-130	0		30
1,4-Dichlorobenzene	83		83		70-130	0		30
Methyl tert butyl ether	84		82		66-130	2		30
p/m-Xylene	86		84		70-130	2		30
o-Xylene	84		83		70-130	1		30
cis-1,2-Dichloroethene	90		84		70-130	7		30
Dibromomethane	90		89		70-130	1		30
Styrene	80		78		70-130	3		30
Dichlorodifluoromethane	80		72		30-146	11		30
Acetone	72		69		54-140	4		30
Carbon disulfide	92		85		59-130	8		30
2-Butanone	59	Q	54	Q	70-130	9		30
Vinyl acetate	83		80		70-130	4		30
4-Methyl-2-pentanone	71		73		70-130	3		30
1,2,3-Trichloropropane	81		82		68-130	1		30
2-Hexanone	60	Q	64	Q	70-130	6		30
Bromochloromethane	93		91		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02-10 Batch: WG1194240-3 WG1194240-4								
2,2-Dichloropropane	84		80		70-130	5		30
1,2-Dibromoethane	89		89		70-130	0		30
1,3-Dichloropropane	86		85		69-130	1		30
1,1,1,2-Tetrachloroethane	85		83		70-130	2		30
Bromobenzene	86		85		70-130	1		30
n-Butylbenzene	82		84		70-130	2		30
sec-Butylbenzene	82		83		70-130	1		30
tert-Butylbenzene	86		87		70-130	1		30
o-Chlorotoluene	86		80		70-130	7		30
p-Chlorotoluene	82		80		70-130	2		30
1,2-Dibromo-3-chloropropane	81		79		68-130	3		30
Hexachlorobutadiene	83		86		67-130	4		30
Isopropylbenzene	86		86		70-130	0		30
p-Isopropyltoluene	85		86		70-130	1		30
Naphthalene	80		80		70-130	0		30
Acrylonitrile	81		80		70-130	1		30
n-Propylbenzene	85		85		70-130	0		30
1,2,3-Trichlorobenzene	85		87		70-130	2		30
1,2,4-Trichlorobenzene	83		85		70-130	2		30
1,3,5-Trimethylbenzene	84		86		70-130	2		30
1,2,4-Trimethylbenzene	83		83		70-130	0		30
1,4-Dioxane	105		98		65-136	7		30
p-Diethylbenzene	79		80		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02-10 Batch: WG1194240-3 WG1194240-4								
p-Ethyltoluene	80		82		70-130	2		30
1,2,4,5-Tetramethylbenzene	78		78		70-130	0		30
Ethyl ether	87		86		67-130	1		30
trans-1,4-Dichloro-2-butene	76		75		70-130	1		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	94		95		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	93		94		70-130
Dibromofluoromethane	101		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,11,14 Batch: WG1194326-8 WG1194326-9									
Methylene chloride	85		82		70-130		4		30
1,1-Dichloroethane	96		93		70-130		3		30
Chloroform	95		92		70-130		3		30
Carbon tetrachloride	96		92		70-130		4		30
1,2-Dichloropropane	99		95		70-130		4		30
Dibromochloromethane	96		96		70-130		0		30
1,1,2-Trichloroethane	104		102		70-130		2		30
Tetrachloroethene	101		98		70-130		3		30
Chlorobenzene	98		96		70-130		2		30
Trichlorofluoromethane	87		84		70-139		4		30
1,2-Dichloroethane	100		97		70-130		3		30
1,1,1-Trichloroethane	100		96		70-130		4		30
Bromodichloromethane	97		96		70-130		1		30
trans-1,3-Dichloropropene	98		97		70-130		1		30
cis-1,3-Dichloropropene	93		92		70-130		1		30
1,1-Dichloropropene	110		106		70-130		4		30
Bromoform	97		96		70-130		1		30
1,1,2,2-Tetrachloroethane	103		100		70-130		3		30
Benzene	98		94		70-130		4		30
Toluene	103		99		70-130		4		30
Ethylbenzene	107		104		70-130		3		30
Chloromethane	92		85		52-130		8		30
Bromomethane	68		68		57-147		0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,11,14 Batch: WG1194326-8 WG1194326-9									
Vinyl chloride	88		83		67-130		6		30
Chloroethane	80		77		50-151		4		30
1,1-Dichloroethene	98		83		65-135		17		30
trans-1,2-Dichloroethene	89		86		70-130		3		30
Trichloroethene	98		93		70-130		5		30
1,2-Dichlorobenzene	100		100		70-130		0		30
1,3-Dichlorobenzene	101		101		70-130		0		30
1,4-Dichlorobenzene	99		96		70-130		3		30
Methyl tert butyl ether	95		94		66-130		1		30
p/m-Xylene	107		105		70-130		2		30
o-Xylene	107		105		70-130		2		30
cis-1,2-Dichloroethene	92		91		70-130		1		30
Dibromomethane	96		94		70-130		2		30
Styrene	98		97		70-130		1		30
Dichlorodifluoromethane	59		55		30-146		7		30
Acetone	112		106		54-140		6		30
Carbon disulfide	88		84		59-130		5		30
2-Butanone	104		94		70-130		10		30
Vinyl acetate	116		112		70-130		4		30
4-Methyl-2-pentanone	99		97		70-130		2		30
1,2,3-Trichloropropane	105		104		68-130		1		30
2-Hexanone	111		100		70-130		10		30
Bromochloromethane	91		89		70-130		2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,11,14 Batch: WG1194326-8 WG1194326-9								
2,2-Dichloropropane	103		99		70-130	4		30
1,2-Dibromoethane	100		101		70-130	1		30
1,3-Dichloropropane	105		104		69-130	1		30
1,1,1,2-Tetrachloroethane	99		100		70-130	1		30
Bromobenzene	100		97		70-130	3		30
n-Butylbenzene	115		113		70-130	2		30
sec-Butylbenzene	104		105		70-130	1		30
tert-Butylbenzene	111		108		70-130	3		30
o-Chlorotoluene	108		105		70-130	3		30
p-Chlorotoluene	110		107		70-130	3		30
1,2-Dibromo-3-chloropropane	96		97		68-130	1		30
Hexachlorobutadiene	102		98		67-130	4		30
Isopropylbenzene	113		109		70-130	4		30
p-Isopropyltoluene	111		111		70-130	0		30
Naphthalene	99		99		70-130	0		30
Acrylonitrile	94		89		70-130	5		30
n-Propylbenzene	112		108		70-130	4		30
1,2,3-Trichlorobenzene	99		98		70-130	1		30
1,2,4-Trichlorobenzene	101		101		70-130	0		30
1,3,5-Trimethylbenzene	111		107		70-130	4		30
1,2,4-Trimethylbenzene	113		110		70-130	3		30
1,4-Dioxane	108		106		65-136	2		30
p-Diethylbenzene	109		107		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,11,14 Batch: WG1194326-8 WG1194326-9								
p-Ethyltoluene	107		104		70-130	3		30
1,2,4,5-Tetramethylbenzene	102		102		70-130	0		30
Ethyl ether	77		78		67-130	1		30
trans-1,4-Dichloro-2-butene	101		106		70-130	5		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	110		108		70-130
Toluene-d8	107		107		70-130
4-Bromofluorobenzene	110		107		70-130
Dibromofluoromethane	99		99		70-130

SEMIVOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 08:28
 Analyst: RC
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	2800		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	160	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	150	J	ug/kg	180	63.	1
Butyl benzyl phthalate	57	J	ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	1400		ug/kg	110	20.	1
Benzo(a)pyrene	1700		ug/kg	140	44.	1
Benzo(b)fluoranthene	2300		ug/kg	110	31.	1
Benzo(k)fluoranthene	740		ug/kg	110	29.	1
Chrysene	1500		ug/kg	110	19.	1
Acenaphthylene	880		ug/kg	140	28.	1
Anthracene	640		ug/kg	110	35.	1
Benzo(ghi)perylene	1300		ug/kg	140	21.	1
Fluorene	150	J	ug/kg	180	18.	1
Phenanthrene	1300		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	260		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	1300		ug/kg	140	25.	1
Pyrene	2400		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	99	J	ug/kg	180	17.	1
2-Methylnaphthalene	83	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	35	J	ug/kg	260	28.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
Client ID: RB05_0-2
Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	250		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	93		10-136
4-Terphenyl-d14	54		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 04:13
 Analyst: RC
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	61	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	1100		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	48	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	87	J	ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-02

Date Collected: 12/21/18 09:40

Client ID: RB05_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	420		ug/kg	110	20.	1
Benzo(a)pyrene	490		ug/kg	140	44.	1
Benzo(b)fluoranthene	590		ug/kg	110	30.	1
Benzo(k)fluoranthene	200		ug/kg	110	29.	1
Chrysene	400		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	130		ug/kg	110	35.	1
Benzo(ghi)perylene	310		ug/kg	140	21.	1
Fluorene	49	J	ug/kg	180	18.	1
Phenanthrene	500		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	53	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	310		ug/kg	140	25.	1
Pyrene	950		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	28	J	ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	860	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	86.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	37	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	66		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	57		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
Client ID: RB05_13-15
Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 12/30/18 04:39
Analyst: RC
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	100	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	1100		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	95	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-03

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	530		ug/kg	110	20.	1
Benzo(a)pyrene	620		ug/kg	140	44.	1
Benzo(b)fluoranthene	680		ug/kg	110	30.	1
Benzo(k)fluoranthene	200		ug/kg	110	29.	1
Chrysene	480		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	130		ug/kg	110	35.	1
Benzo(ghi)perylene	380		ug/kg	140	21.	1
Fluorene	62	J	ug/kg	180	18.	1
Phenanthrene	470		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	66	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	380		ug/kg	140	25.	1
Pyrene	1000		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	37	J	ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
Client ID: RB05_13-15
Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	36	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	98		10-136
4-Terphenyl-d14	49		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
 Client ID: RB05_19-21
 Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 05:04
 Analyst: RC
 Percent Solids: 75%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	310		ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	220	21.	1
1,2-Dichlorobenzene	ND		ug/kg	220	39.	1
1,3-Dichlorobenzene	ND		ug/kg	220	37.	1
1,4-Dichlorobenzene	ND		ug/kg	220	38.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	57.	1
2,4-Dinitrotoluene	ND		ug/kg	220	43.	1
2,6-Dinitrotoluene	ND		ug/kg	220	37.	1
Fluoranthene	1800		ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1
Hexachlorobutadiene	ND		ug/kg	220	32.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	200	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	150	J	ug/kg	220	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	33.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	75.	1
Butyl benzyl phthalate	ND		ug/kg	220	54.	1
Di-n-butylphthalate	ND		ug/kg	220	41.	1
Di-n-octylphthalate	ND		ug/kg	220	73.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-04

Date Collected: 12/21/18 10:00

Client ID: RB05_19-21

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	20.	1
Dimethyl phthalate	ND		ug/kg	220	45.	1
Benzo(a)anthracene	1100		ug/kg	130	24.	1
Benzo(a)pyrene	1100		ug/kg	170	53.	1
Benzo(b)fluoranthene	1200		ug/kg	130	36.	1
Benzo(k)fluoranthene	360		ug/kg	130	34.	1
Chrysene	930		ug/kg	130	22.	1
Acenaphthylene	52	J	ug/kg	170	33.	1
Anthracene	120	J	ug/kg	130	42.	1
Benzo(ghi)perylene	740		ug/kg	170	25.	1
Fluorene	47	J	ug/kg	220	21.	1
Phenanthrene	250		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	130		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	650		ug/kg	170	30.	1
Pyrene	1700		ug/kg	130	21.	1
Biphenyl	ND		ug/kg	490	50.	1
4-Chloroaniline	ND		ug/kg	220	39.	1
2-Nitroaniline	ND		ug/kg	220	42.	1
3-Nitroaniline	ND		ug/kg	220	41.	1
4-Nitroaniline	ND		ug/kg	220	89.	1
Dibenzofuran	43	J	ug/kg	220	20.	1
2-Methylnaphthalene	31	J	ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	22.	1
Acetophenone	ND		ug/kg	220	27.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	41.	1
p-Chloro-m-cresol	ND		ug/kg	220	32.	1
2-Chlorophenol	ND		ug/kg	220	26.	1
2,4-Dichlorophenol	ND		ug/kg	190	35.	1
2,4-Dimethylphenol	ND		ug/kg	220	71.	1
2-Nitrophenol	ND		ug/kg	470	81.	1
4-Nitrophenol	ND		ug/kg	300	88.	1
2,4-Dinitrophenol	ND		ug/kg	1000	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	100	1
Pentachlorophenol	ND		ug/kg	170	47.	1
Phenol	ND		ug/kg	220	32.	1
2-Methylphenol	ND		ug/kg	220	33.	1
3-Methylphenol/4-Methylphenol	120	J	ug/kg	310	34.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
Client ID: RB05_19-21
Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	220	41.	1
Benzoic Acid	ND		ug/kg	700	220	1
Benzyl Alcohol	ND		ug/kg	220	66.	1
Carbazole	40	J	ug/kg	220	21.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	83		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	102		10-136
4-Terphenyl-d14	58		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 05:56
 Analyst: RC
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	52	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	4200		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	110	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	2400		ug/kg	110	21.	1
Benzo(a)pyrene	2600		ug/kg	150	46.	1
Benzo(b)fluoranthene	3800		ug/kg	110	32.	1
Benzo(k)fluoranthene	1100		ug/kg	110	30.	1
Chrysene	2400		ug/kg	110	20.	1
Acenaphthylene	1500		ug/kg	150	29.	1
Anthracene	700		ug/kg	110	37.	1
Benzo(ghi)perylene	2000		ug/kg	150	22.	1
Fluorene	97	J	ug/kg	190	18.	1
Phenanthrene	1400		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	400		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	2000		ug/kg	150	26.	1
Pyrene	3700		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	51	J	ug/kg	190	18.	1
2-Methylnaphthalene	34	J	ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	49	J	ug/kg	270	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	240		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	55		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 06:21
 Analyst: RC
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	96	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	6300		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	280		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06

Date Collected: 12/21/18 12:40

Client ID: RB06_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	3300		ug/kg	110	20.	1
Benzo(a)pyrene	3500		ug/kg	150	45.	1
Benzo(b)fluoranthene	5000		ug/kg	110	31.	1
Benzo(k)fluoranthene	1300		ug/kg	110	29.	1
Chrysene	3200		ug/kg	110	19.	1
Acenaphthylene	2400		ug/kg	150	28.	1
Anthracene	1200		ug/kg	110	36.	1
Benzo(ghi)perylene	2900		ug/kg	150	22.	1
Fluorene	200		ug/kg	180	18.	1
Phenanthrene	3100		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	630		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	2900		ug/kg	150	25.	1
Pyrene	5100		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	190		ug/kg	180	17.	1
2-Methylnaphthalene	87	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	150		ug/kg	150	40.	1
Phenol	43	J	ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	82	J	ug/kg	260	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	420		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	26		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	16		10-136
4-Terphenyl-d14	54		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 02:06
 Analyst: RC
 Percent Solids: 69%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	190	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	240	27.	1
Hexachlorobenzene	ND		ug/kg	140	27.	1
Bis(2-chloroethyl)ether	ND		ug/kg	210	32.	1
2-Chloronaphthalene	ND		ug/kg	240	24.	1
1,2-Dichlorobenzene	ND		ug/kg	240	43.	1
1,3-Dichlorobenzene	ND		ug/kg	240	41.	1
1,4-Dichlorobenzene	ND		ug/kg	240	42.	1
3,3'-Dichlorobenzidine	ND		ug/kg	240	63.	1
2,4-Dinitrotoluene	ND		ug/kg	240	48.	1
2,6-Dinitrotoluene	ND		ug/kg	240	41.	1
Fluoranthene	ND		ug/kg	140	27.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	240	26.	1
4-Bromophenyl phenyl ether	ND		ug/kg	240	36.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	290	41.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	260	24.	1
Hexachlorobutadiene	ND		ug/kg	240	35.	1
Hexachlorocyclopentadiene	ND		ug/kg	680	220	1
Hexachloroethane	ND		ug/kg	190	38.	1
Isophorone	ND		ug/kg	210	31.	1
Naphthalene	58	J	ug/kg	240	29.	1
Nitrobenzene	ND		ug/kg	210	35.	1
NDPA/DPA	ND		ug/kg	190	27.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	240	37.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	240	82.	1
Butyl benzyl phthalate	ND		ug/kg	240	60.	1
Di-n-butylphthalate	ND		ug/kg	240	45.	1
Di-n-octylphthalate	ND		ug/kg	240	81.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-07

Date Collected: 12/21/18 12:50

Client ID: RB06_10-12

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	240	22.	1
Dimethyl phthalate	ND		ug/kg	240	50.	1
Benzo(a)anthracene	ND		ug/kg	140	27.	1
Benzo(a)pyrene	ND		ug/kg	190	58.	1
Benzo(b)fluoranthene	ND		ug/kg	140	40.	1
Benzo(k)fluoranthene	ND		ug/kg	140	38.	1
Chrysene	ND		ug/kg	140	25.	1
Acenaphthylene	ND		ug/kg	190	37.	1
Anthracene	ND		ug/kg	140	46.	1
Benzo(ghi)perylene	ND		ug/kg	190	28.	1
Fluorene	ND		ug/kg	240	23.	1
Phenanthrene	ND		ug/kg	140	29.	1
Dibenzo(a,h)anthracene	ND		ug/kg	140	28.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	190	33.	1
Pyrene	ND		ug/kg	140	24.	1
Biphenyl	ND		ug/kg	540	55.	1
4-Chloroaniline	ND		ug/kg	240	43.	1
2-Nitroaniline	ND		ug/kg	240	46.	1
3-Nitroaniline	ND		ug/kg	240	45.	1
4-Nitroaniline	ND		ug/kg	240	99.	1
Dibenzofuran	ND		ug/kg	240	22.	1
2-Methylnaphthalene	ND		ug/kg	290	29.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	25.	1
Acetophenone	ND		ug/kg	240	30.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	45.	1
p-Chloro-m-cresol	ND		ug/kg	240	36.	1
2-Chlorophenol	ND		ug/kg	240	28.	1
2,4-Dichlorophenol	ND		ug/kg	210	38.	1
2,4-Dimethylphenol	ND		ug/kg	240	79.	1
2-Nitrophenol	ND		ug/kg	520	90.	1
4-Nitrophenol	ND		ug/kg	330	97.	1
2,4-Dinitrophenol	ND		ug/kg	1100	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	620	110	1
Pentachlorophenol	ND		ug/kg	190	52.	1
Phenol	ND		ug/kg	240	36.	1
2-Methylphenol	ND		ug/kg	240	37.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	340	37.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	240	46.	1
Benzoic Acid	ND		ug/kg	770	240	1
Benzyl Alcohol	ND		ug/kg	240	73.	1
Carbazole	ND		ug/kg	240	23.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	93		10-136
4-Terphenyl-d14	55		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 06:46
 Analyst: RC
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	80	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	3200		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	140	J	ug/kg	180	23.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-08

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	1600		ug/kg	110	21.	1
Benzo(a)pyrene	1600		ug/kg	150	45.	1
Benzo(b)fluoranthene	2200		ug/kg	110	31.	1
Benzo(k)fluoranthene	790		ug/kg	110	30.	1
Chrysene	1600		ug/kg	110	19.	1
Acenaphthylene	640		ug/kg	150	29.	1
Anthracene	460		ug/kg	110	36.	1
Benzo(ghi)perylene	1100		ug/kg	150	22.	1
Fluorene	100	J	ug/kg	180	18.	1
Phenanthrene	1700		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	230		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	1100		ug/kg	150	26.	1
Pyrene	2700		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	78	J	ug/kg	180	18.	1
2-Methylnaphthalene	97	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	180		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	98		10-136
4-Terphenyl-d14	63		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 03:48
 Analyst: RC
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	42	J	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-09

Date Collected: 12/21/18 13:40

Client ID: RB04_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	26	J	ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	43	J	ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	25	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	32	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	24	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	48	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	ND		ug/kg	180	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	80		10-136
4-Terphenyl-d14	62		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 05:30
 Analyst: RC
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	160		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	3200		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	570		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-10

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	1800		ug/kg	120	22.	1
Benzo(a)pyrene	1700		ug/kg	150	47.	1
Benzo(b)fluoranthene	2100		ug/kg	120	32.	1
Benzo(k)fluoranthene	560		ug/kg	120	31.	1
Chrysene	1500		ug/kg	120	20.	1
Acenaphthylene	110	J	ug/kg	150	30.	1
Anthracene	620		ug/kg	120	37.	1
Benzo(ghi)perylene	880		ug/kg	150	22.	1
Fluorene	180	J	ug/kg	190	19.	1
Phenanthrene	1600		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	180		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	930		ug/kg	150	27.	1
Pyrene	3100		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	86	J	ug/kg	190	18.	1
2-Methylnaphthalene	54	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	130	J	ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	30	J	ug/kg	280	30.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	62	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	55		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 03:23
 Analyst: RC
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	55	J	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	26	J	ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	35	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	27	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	28	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	51	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	86.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	81		10-136
4-Terphenyl-d14	81		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 16:52
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 12/27/18 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	43		10-120
4-Terphenyl-d14	68		41-149

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/03/19 22:26
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 12/27/18 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-13

Date Collected: 12/21/18 14:45

Client ID: SOFB01_122118

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	86		41-149

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 07:12
 Analyst: RC
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	970		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	4800		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	1100		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	140	J	ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	2400		ug/kg	110	21.	1
Benzo(a)pyrene	2300		ug/kg	150	46.	1
Benzo(b)fluoranthene	2700		ug/kg	110	32.	1
Benzo(k)fluoranthene	900		ug/kg	110	30.	1
Chrysene	2000		ug/kg	110	20.	1
Acenaphthylene	89	J	ug/kg	150	29.	1
Anthracene	1800		ug/kg	110	37.	1
Benzo(ghi)perylene	1300		ug/kg	150	22.	1
Fluorene	870		ug/kg	190	18.	1
Phenanthrene	4600		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	260		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	1400		ug/kg	150	26.	1
Pyrene	4500		ug/kg	110	19.	1
Biphenyl	100	J	ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	520		ug/kg	190	18.	1
2-Methylnaphthalene	270		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	180		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	440		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	92		10-136
4-Terphenyl-d14	54		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/30/18 00:16
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11,14 Batch: WG1192583-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 12/30/18 00:16
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11,14 Batch: WG1192583-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	69.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	160	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 12/30/18 00:16
 Analyst: RC

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11,14 Batch: WG1192583-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	87		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	85		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/31/18 14:16
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 20:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1192882-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/31/18 14:16
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 20:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1192882-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 12/31/18 14:16
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 20:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1192882-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	39		10-120
4-Terphenyl-d14	73		41-149

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/03/19 18:56
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 13 Batch: WG1192883-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	0.01	J	ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D-SIM
 Analytical Date: 01/03/19 18:56
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 12/26/18 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 13 Batch: WG1192883-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	49		10-120
4-Terphenyl-d14	89		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192583-2 WG1192583-3								
Acenaphthene	87		82		31-137	6		50
1,2,4-Trichlorobenzene	91		86		38-107	6		50
Hexachlorobenzene	91		84		40-140	8		50
Bis(2-chloroethyl)ether	88		82		40-140	7		50
2-Chloronaphthalene	96		92		40-140	4		50
1,2-Dichlorobenzene	87		83		40-140	5		50
1,3-Dichlorobenzene	86		82		40-140	5		50
1,4-Dichlorobenzene	85		83		28-104	2		50
3,3'-Dichlorobenzidine	84		87		40-140	4		50
2,4-Dinitrotoluene	110		104		40-132	6		50
2,6-Dinitrotoluene	110		102		40-140	8		50
Fluoranthene	98		96		40-140	2		50
4-Chlorophenyl phenyl ether	87		81		40-140	7		50
4-Bromophenyl phenyl ether	91		83		40-140	9		50
Bis(2-chloroisopropyl)ether	81		76		40-140	6		50
Bis(2-chloroethoxy)methane	91		82		40-117	10		50
Hexachlorobutadiene	86		81		40-140	6		50
Hexachlorocyclopentadiene	84		78		40-140	7		50
Hexachloroethane	85		82		40-140	4		50
Isophorone	89		83		40-140	7		50
Naphthalene	92		89		40-140	3		50
Nitrobenzene	94		88		40-140	7		50
NDPA/DPA	89		86		36-157	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192583-2 WG1192583-3								
n-Nitrosodi-n-propylamine	86		81		32-121	6		50
Bis(2-ethylhexyl)phthalate	115		113		40-140	2		50
Butyl benzyl phthalate	109		109		40-140	0		50
Di-n-butylphthalate	108		105		40-140	3		50
Di-n-octylphthalate	118		117		40-140	1		50
Diethyl phthalate	94		89		40-140	5		50
Dimethyl phthalate	97		91		40-140	6		50
Benzo(a)anthracene	91		88		40-140	3		50
Benzo(a)pyrene	106		105		40-140	1		50
Benzo(b)fluoranthene	110		100		40-140	10		50
Benzo(k)fluoranthene	97		104		40-140	7		50
Chrysene	98		96		40-140	2		50
Acenaphthylene	99		93		40-140	6		50
Anthracene	102		99		40-140	3		50
Benzo(ghi)perylene	101		97		40-140	4		50
Fluorene	94		88		40-140	7		50
Phenanthrene	98		94		40-140	4		50
Dibenzo(a,h)anthracene	98		94		40-140	4		50
Indeno(1,2,3-cd)pyrene	100		97		40-140	3		50
Pyrene	98		97		35-142	1		50
Biphenyl	99		94		54-104	5		50
4-Chloroaniline	83		81		40-140	2		50
2-Nitroaniline	115		111		47-134	4		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192583-2 WG1192583-3								
3-Nitroaniline	79		80		26-129	1		50
4-Nitroaniline	97		92		41-125	5		50
Dibenzofuran	93		88		40-140	6		50
2-Methylnaphthalene	93		88		40-140	6		50
1,2,4,5-Tetrachlorobenzene	99		92		40-117	7		50
Acetophenone	94		88		14-144	7		50
2,4,6-Trichlorophenol	105		102		30-130	3		50
p-Chloro-m-cresol	100		96		26-103	4		50
2-Chlorophenol	99		92		25-102	7		50
2,4-Dichlorophenol	104		100		30-130	4		50
2,4-Dimethylphenol	101		94		30-130	7		50
2-Nitrophenol	117		107		30-130	9		50
4-Nitrophenol	114		108		11-114	5		50
2,4-Dinitrophenol	108		106		4-130	2		50
4,6-Dinitro-o-cresol	107		104		10-130	3		50
Pentachlorophenol	109		103		17-109	6		50
Phenol	88		85		26-90	3		50
2-Methylphenol	97		92		30-130.	5		50
3-Methylphenol/4-Methylphenol	106		98		30-130	8		50
2,4,5-Trichlorophenol	105		101		30-130	4		50
Benzoic Acid	33		38		10-110	14		50
Benzyl Alcohol	95		89		40-140	7		50
Carbazole	102		100		54-128	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192583-2 WG1192583-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	98		91		25-120
Phenol-d6	98		91		10-120
Nitrobenzene-d5	99		91		23-120
2-Fluorobiphenyl	95		92		30-120
2,4,6-Tribromophenol	101		91		10-136
4-Terphenyl-d14	89		85		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1192882-2 WG1192882-3								
Acenaphthene	72		72		37-111	0		30
1,2,4-Trichlorobenzene	73		76		39-98	4		30
Hexachlorobenzene	84		83		40-140	1		30
Bis(2-chloroethyl)ether	79		83		40-140	5		30
2-Chloronaphthalene	77		76		40-140	1		30
1,2-Dichlorobenzene	71		73		40-140	3		30
1,3-Dichlorobenzene	70		71		40-140	1		30
1,4-Dichlorobenzene	69		71		36-97	3		30
3,3'-Dichlorobenzidine	29	Q	43		40-140	39	Q	30
2,4-Dinitrotoluene	78		76		48-143	3		30
2,6-Dinitrotoluene	79		77		40-140	3		30
Fluoranthene	76		74		40-140	3		30
4-Chlorophenyl phenyl ether	76		74		40-140	3		30
4-Bromophenyl phenyl ether	85		81		40-140	5		30
Bis(2-chloroisopropyl)ether	83		89		40-140	7		30
Bis(2-chloroethoxy)methane	77		83		40-140	8		30
Hexachlorobutadiene	78		75		40-140	4		30
Hexachlorocyclopentadiene	75		74		40-140	1		30
Hexachloroethane	72		72		40-140	0		30
Isophorone	76		81		40-140	6		30
Naphthalene	73		74		40-140	1		30
Nitrobenzene	76		81		40-140	6		30
NDPA/DPA	70		69		40-140	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1192882-2 WG1192882-3								
n-Nitrosodi-n-propylamine	79		83		29-132	5		30
Bis(2-ethylhexyl)phthalate	69		70		40-140	1		30
Butyl benzyl phthalate	63		62		40-140	2		30
Di-n-butylphthalate	66		66		40-140	0		30
Di-n-octylphthalate	62		63		40-140	2		30
Diethyl phthalate	73		72		40-140	1		30
Dimethyl phthalate	76		75		40-140	1		30
Benzo(a)anthracene	71		72		40-140	1		30
Benzo(a)pyrene	84		82		40-140	2		30
Benzo(b)fluoranthene	80		82		40-140	2		30
Benzo(k)fluoranthene	86		81		40-140	6		30
Chrysene	75		76		40-140	1		30
Acenaphthylene	76		76		45-123	0		30
Anthracene	74		73		40-140	1		30
Benzo(ghi)perylene	79		78		40-140	1		30
Fluorene	74		74		40-140	0		30
Phenanthrene	72		72		40-140	0		30
Dibenzo(a,h)anthracene	76		76		40-140	0		30
Indeno(1,2,3-cd)pyrene	71		72		40-140	1		30
Pyrene	74		72		26-127	3		30
Biphenyl	76		76		40-140	0		30
4-Chloroaniline	44		51		40-140	15		30
2-Nitroaniline	75		73		52-143	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1192882-2 WG1192882-3								
3-Nitroaniline	51		58		25-145	13		30
4-Nitroaniline	61		58		51-143	5		30
Dibenzofuran	74		74		40-140	0		30
2-Methylnaphthalene	76		76		40-140	0		30
1,2,4,5-Tetrachlorobenzene	78		79		2-134	1		30
Acetophenone	76		82		39-129	8		30
2,4,6-Trichlorophenol	75		72		30-130	4		30
p-Chloro-m-cresol	75		75		23-97	0		30
2-Chlorophenol	71		76		27-123	7		30
2,4-Dichlorophenol	74		75		30-130	1		30
2,4-Dimethylphenol	30		29	Q	30-130	3		30
2-Nitrophenol	72		77		30-130	7		30
4-Nitrophenol	78		73		10-80	7		30
2,4-Dinitrophenol	84		84		20-130	0		30
4,6-Dinitro-o-cresol	82		80		20-164	2		30
Pentachlorophenol	82		72		9-103	13		30
Phenol	60		63		12-110	5		30
2-Methylphenol	64		65		30-130	2		30
3-Methylphenol/4-Methylphenol	70		72		30-130	3		30
2,4,5-Trichlorophenol	77		78		30-130	1		30
Benzoic Acid	55		62		10-164	12		30
Benzyl Alcohol	69		76		26-116	10		30
Carbazole	70		69		55-144	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1192882-2 WG1192882-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
2-Fluorophenol	65		71		21-120
Phenol-d6	55		60		10-120
Nitrobenzene-d5	74		80		23-120
2-Fluorobiphenyl	73		73		15-120
2,4,6-Tribromophenol	80		76		10-120
4-Terphenyl-d14	66		65		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 13 Batch: WG1192883-2 WG1192883-3								
Acenaphthene	82		72		40-140	13		40
2-Chloronaphthalene	76		69		40-140	10		40
Fluoranthene	87		79		40-140	10		40
Hexachlorobutadiene	68		68		40-140	0		40
Naphthalene	74		67		40-140	10		40
Benzo(a)anthracene	89		79		40-140	12		40
Benzo(a)pyrene	96		85		40-140	12		40
Benzo(b)fluoranthene	92		82		40-140	11		40
Benzo(k)fluoranthene	98		86		40-140	13		40
Chrysene	83		74		40-140	11		40
Acenaphthylene	85		75		40-140	13		40
Anthracene	86		77		40-140	11		40
Benzo(ghi)perylene	82		76		40-140	8		40
Fluorene	86		76		40-140	12		40
Phenanthrene	81		72		40-140	12		40
Dibenzo(a,h)anthracene	88		82		40-140	7		40
Indeno(1,2,3-cd)pyrene	88		81		40-140	8		40
Pyrene	87		79		40-140	10		40
2-Methylnaphthalene	77		69		40-140	11		40
Pentachlorophenol	89		82		40-140	8		40
Hexachlorobenzene	82		75		40-140	9		40
Hexachloroethane	66		67		40-140	2		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 13 Batch: WG1192883-2 WG1192883-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	57		53		21-120
Phenol-d6	54		48		10-120
Nitrobenzene-d5	89		78		23-120
2-Fluorobiphenyl	75		69		15-120
2,4,6-Tribromophenol	60		63		10-120
4-Terphenyl-d14	80		73		41-149

PCBS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 18:52
 Analyst: HT
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.4	3.14	1	A
Aroclor 1221	ND		ug/kg	35.4	3.55	1	A
Aroclor 1232	ND		ug/kg	35.4	7.50	1	A
Aroclor 1242	ND		ug/kg	35.4	4.77	1	A
Aroclor 1248	ND		ug/kg	35.4	5.31	1	A
Aroclor 1254	ND		ug/kg	35.4	3.87	1	A
Aroclor 1260	57.7		ug/kg	35.4	6.54	1	B
Aroclor 1262	ND		ug/kg	35.4	4.49	1	A
Aroclor 1268	ND		ug/kg	35.4	3.67	1	A
PCBs, Total	57.7		ug/kg	35.4	3.14	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	106		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 19:05
 Analyst: HT
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	3.27	1	A
Aroclor 1221	ND		ug/kg	36.8	3.69	1	A
Aroclor 1232	ND		ug/kg	36.8	7.80	1	A
Aroclor 1242	ND		ug/kg	36.8	4.96	1	A
Aroclor 1248	ND		ug/kg	36.8	5.52	1	A
Aroclor 1254	ND		ug/kg	36.8	4.03	1	A
Aroclor 1260	ND		ug/kg	36.8	6.80	1	A
Aroclor 1262	ND		ug/kg	36.8	4.67	1	A
Aroclor 1268	ND		ug/kg	36.8	3.81	1	A
PCBs, Total	ND		ug/kg	36.8	3.27	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 20:48
 Analyst: HT
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.5	3.24	1	A
Aroclor 1221	ND		ug/kg	36.5	3.65	1	A
Aroclor 1232	ND		ug/kg	36.5	7.73	1	A
Aroclor 1242	ND		ug/kg	36.5	4.92	1	A
Aroclor 1248	ND		ug/kg	36.5	5.47	1	A
Aroclor 1254	ND		ug/kg	36.5	3.99	1	A
Aroclor 1260	ND		ug/kg	36.5	6.74	1	A
Aroclor 1262	ND		ug/kg	36.5	4.63	1	A
Aroclor 1268	ND		ug/kg	36.5	3.78	1	A
PCBs, Total	ND		ug/kg	36.5	3.24	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
Client ID: RB05_19-21
Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 12/28/18 21:01
Analyst: HT
Percent Solids: 75%

Extraction Method: EPA 3546
Extraction Date: 12/24/18 00:16
Cleanup Method: EPA 3665A
Cleanup Date: 12/24/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	42.7	3.79	1	A
Aroclor 1221	ND		ug/kg	42.7	4.28	1	A
Aroclor 1232	ND		ug/kg	42.7	9.05	1	A
Aroclor 1242	ND		ug/kg	42.7	5.75	1	A
Aroclor 1248	ND		ug/kg	42.7	6.40	1	A
Aroclor 1254	ND		ug/kg	42.7	4.67	1	A
Aroclor 1260	ND		ug/kg	42.7	7.89	1	A
Aroclor 1262	ND		ug/kg	42.7	5.42	1	A
Aroclor 1268	ND		ug/kg	42.7	4.42	1	A
PCBs, Total	ND		ug/kg	42.7	3.79	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	35		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	44		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 21:14
 Analyst: HT
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.5	3.24	1	A
Aroclor 1221	ND		ug/kg	36.5	3.66	1	A
Aroclor 1232	ND		ug/kg	36.5	7.75	1	A
Aroclor 1242	ND		ug/kg	36.5	4.92	1	A
Aroclor 1248	ND		ug/kg	36.5	5.48	1	A
Aroclor 1254	ND		ug/kg	36.5	4.00	1	A
Aroclor 1260	ND		ug/kg	36.5	6.75	1	A
Aroclor 1262	ND		ug/kg	36.5	4.64	1	A
Aroclor 1268	13.1	J	ug/kg	36.5	3.78	1	A
PCBs, Total	13.1	J	ug/kg	36.5	3.24	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	100		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 21:27
 Analyst: HT
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.2	3.22	1	A
Aroclor 1221	ND		ug/kg	36.2	3.63	1	A
Aroclor 1232	ND		ug/kg	36.2	7.68	1	A
Aroclor 1242	ND		ug/kg	36.2	4.88	1	A
Aroclor 1248	ND		ug/kg	36.2	5.44	1	A
Aroclor 1254	ND		ug/kg	36.2	3.96	1	A
Aroclor 1260	ND		ug/kg	36.2	6.70	1	A
Aroclor 1262	ND		ug/kg	36.2	4.60	1	A
Aroclor 1268	13.0	J	ug/kg	36.2	3.75	1	B
PCBs, Total	13.0	J	ug/kg	36.2	3.22	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	125		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 21:40
 Analyst: HT
 Percent Solids: 69%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	47.9	4.25	1	A
Aroclor 1221	ND		ug/kg	47.9	4.80	1	A
Aroclor 1232	ND		ug/kg	47.9	10.2	1	A
Aroclor 1242	ND		ug/kg	47.9	6.46	1	A
Aroclor 1248	ND		ug/kg	47.9	7.18	1	A
Aroclor 1254	ND		ug/kg	47.9	5.24	1	A
Aroclor 1260	ND		ug/kg	47.9	8.85	1	A
Aroclor 1262	ND		ug/kg	47.9	6.08	1	A
Aroclor 1268	ND		ug/kg	47.9	4.96	1	A
PCBs, Total	ND		ug/kg	47.9	4.25	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 21:53
 Analyst: HT
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	3.27	1	A
Aroclor 1221	ND		ug/kg	36.8	3.69	1	A
Aroclor 1232	ND		ug/kg	36.8	7.81	1	A
Aroclor 1242	ND		ug/kg	36.8	4.96	1	A
Aroclor 1248	ND		ug/kg	36.8	5.52	1	A
Aroclor 1254	ND		ug/kg	36.8	4.03	1	A
Aroclor 1260	48.7	P	ug/kg	36.8	6.80	1	B
Aroclor 1262	ND		ug/kg	36.8	4.68	1	A
Aroclor 1268	17.5	J	ug/kg	36.8	3.82	1	A
PCBs, Total	66.2	J	ug/kg	36.8	3.27	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 22:06
 Analyst: HT
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:17
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.9	3.28	1	A
Aroclor 1221	ND		ug/kg	36.9	3.70	1	A
Aroclor 1232	ND		ug/kg	36.9	7.83	1	A
Aroclor 1242	ND		ug/kg	36.9	4.98	1	A
Aroclor 1248	ND		ug/kg	36.9	5.54	1	A
Aroclor 1254	ND		ug/kg	36.9	4.04	1	A
Aroclor 1260	ND		ug/kg	36.9	6.83	1	A
Aroclor 1262	ND		ug/kg	36.9	4.69	1	A
Aroclor 1268	ND		ug/kg	36.9	3.83	1	A
PCBs, Total	ND		ug/kg	36.9	3.28	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 22:19
 Analyst: HT
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:17
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.5	3.33	1	A
Aroclor 1221	ND		ug/kg	37.5	3.75	1	A
Aroclor 1232	ND		ug/kg	37.5	7.94	1	A
Aroclor 1242	ND		ug/kg	37.5	5.05	1	A
Aroclor 1248	ND		ug/kg	37.5	5.62	1	A
Aroclor 1254	ND		ug/kg	37.5	4.10	1	A
Aroclor 1260	ND		ug/kg	37.5	6.92	1	A
Aroclor 1262	ND		ug/kg	37.5	4.76	1	A
Aroclor 1268	ND		ug/kg	37.5	3.88	1	A
PCBs, Total	ND		ug/kg	37.5	3.33	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	39		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	52		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 22:32
 Analyst: HT
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:17
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	3.23	1	A
Aroclor 1221	ND		ug/kg	36.4	3.64	1	A
Aroclor 1232	ND		ug/kg	36.4	7.71	1	A
Aroclor 1242	ND		ug/kg	36.4	4.90	1	A
Aroclor 1248	ND		ug/kg	36.4	5.46	1	A
Aroclor 1254	ND		ug/kg	36.4	3.98	1	A
Aroclor 1260	ND		ug/kg	36.4	6.72	1	A
Aroclor 1262	ND		ug/kg	36.4	4.62	1	A
Aroclor 1268	ND		ug/kg	36.4	3.77	1	A
PCBs, Total	ND		ug/kg	36.4	3.23	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
Client ID: SOFB01_122118
Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 12/30/18 17:38
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/28/18 00:45
Cleanup Method: EPA 3665A
Cleanup Date: 12/28/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 22:45
 Analyst: HT
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:17
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.7	3.26	1	A
Aroclor 1221	ND		ug/kg	36.7	3.68	1	A
Aroclor 1232	ND		ug/kg	36.7	7.78	1	A
Aroclor 1242	ND		ug/kg	36.7	4.95	1	A
Aroclor 1248	ND		ug/kg	36.7	5.51	1	A
Aroclor 1254	ND		ug/kg	36.7	4.02	1	A
Aroclor 1260	ND		ug/kg	36.7	6.78	1	A
Aroclor 1262	ND		ug/kg	36.7	4.66	1	A
Aroclor 1268	ND		ug/kg	36.7	3.80	1	A
PCBs, Total	ND		ug/kg	36.7	3.26	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 12/28/18 19:18
Analyst: HT

Extraction Method: EPA 3546
Extraction Date: 12/24/18 00:16
Cleanup Method: EPA 3665A
Cleanup Date: 12/24/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-11,14 Batch: WG1192580-1						
Aroclor 1016	ND		ug/kg	31.7	2.82	A
Aroclor 1221	ND		ug/kg	31.7	3.18	A
Aroclor 1232	ND		ug/kg	31.7	6.72	A
Aroclor 1242	ND		ug/kg	31.7	4.27	A
Aroclor 1248	ND		ug/kg	31.7	4.76	A
Aroclor 1254	ND		ug/kg	31.7	3.47	A
Aroclor 1260	ND		ug/kg	31.7	5.86	A
Aroclor 1262	ND		ug/kg	31.7	4.03	A
Aroclor 1268	ND		ug/kg	31.7	3.28	A
PCBs, Total	ND		ug/kg	31.7	2.82	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	99		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 12/30/18 17:51
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 12/28/18 00:45
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 13 Batch: WG1193305-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	93		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192580-2 WG1192580-3									
Aroclor 1016	70		69		40-140	1		50	A
Aroclor 1260	55		56		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		91		30-150	A
Decachlorobiphenyl	61		59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		89		30-150	B
Decachlorobiphenyl	78		73		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193305-2 WG1193305-3									
Aroclor 1016	75		72		40-140	3		50	A
Aroclor 1260	78		76		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		81		30-150	A
Decachlorobiphenyl	87		82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		84		30-150	B
Decachlorobiphenyl	94		90		30-150	B

PESTICIDES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 11:56
 Analyst: KEG
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.76	0.345	1	A
Lindane	ND		ug/kg	0.734	0.328	1	A
Alpha-BHC	ND		ug/kg	0.734	0.208	1	A
Beta-BHC	ND		ug/kg	1.76	0.668	1	A
Heptachlor	ND		ug/kg	0.880	0.395	1	A
Aldrin	ND		ug/kg	1.76	0.620	1	A
Heptachlor epoxide	3.61		ug/kg	3.30	0.990	1	A
Endrin	ND		ug/kg	0.734	0.301	1	A
Endrin aldehyde	ND		ug/kg	2.20	0.770	1	A
Endrin ketone	ND		ug/kg	1.76	0.453	1	A
Dieldrin	ND		ug/kg	1.10	0.550	1	A
4,4'-DDE	78.5		ug/kg	1.76	0.407	1	A
4,4'-DDD	ND		ug/kg	1.76	0.628	1	A
4,4'-DDT	232	E	ug/kg	3.30	1.42	1	B
Endosulfan I	ND		ug/kg	1.76	0.416	1	A
Endosulfan II	ND		ug/kg	1.76	0.588	1	A
Endosulfan sulfate	ND		ug/kg	0.734	0.349	1	A
Methoxychlor	ND		ug/kg	3.30	1.03	1	A
Toxaphene	ND		ug/kg	33.0	9.24	1	A
cis-Chlordane	10.6	IP	ug/kg	2.20	0.613	1	B
trans-Chlordane	11.8	IP	ug/kg	2.20	0.581	1	A
Chlordane	ND		ug/kg	14.3	5.83	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	84		30-150	B
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	92		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 17:04
 Analyst: KEG
 Percent Solids: 90%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	182	11.4	1	A
2,4,5-T	ND		ug/kg	182	5.63	1	A
2,4,5-TP (Silvex)	ND		ug/kg	182	4.83	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	107		30-150	A
DCAA	93		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01 D
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 13:16
 Analyst: BM
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
4,4'-DDT	265		ug/kg	16.5	7.08	5	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 12:09
 Analyst: KEG
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.346	1	A
Lindane	ND		ug/kg	0.737	0.329	1	A
Alpha-BHC	ND		ug/kg	0.737	0.209	1	A
Beta-BHC	ND		ug/kg	1.77	0.671	1	A
Heptachlor	ND		ug/kg	0.884	0.396	1	A
Aldrin	ND		ug/kg	1.77	0.623	1	A
Heptachlor epoxide	ND		ug/kg	3.32	0.995	1	A
Endrin	ND		ug/kg	0.737	0.302	1	A
Endrin aldehyde	ND		ug/kg	2.21	0.774	1	A
Endrin ketone	ND		ug/kg	1.77	0.455	1	A
Dieldrin	ND		ug/kg	1.10	0.553	1	A
4,4'-DDE	ND		ug/kg	1.77	0.409	1	A
4,4'-DDD	ND		ug/kg	1.77	0.631	1	A
4,4'-DDT	ND		ug/kg	3.32	1.42	1	A
Endosulfan I	ND		ug/kg	1.77	0.418	1	A
Endosulfan II	ND		ug/kg	1.77	0.591	1	A
Endosulfan sulfate	ND		ug/kg	0.737	0.351	1	A
Methoxychlor	ND		ug/kg	3.32	1.03	1	A
Toxaphene	ND		ug/kg	33.2	9.29	1	A
cis-Chlordane	ND		ug/kg	2.21	0.616	1	A
trans-Chlordane	1.28	JIP	ug/kg	2.21	0.584	1	A
Chlordane	ND		ug/kg	14.4	5.86	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	60		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 17:23
 Analyst: KEG
 Percent Solids: 90%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.71	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.90	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	115		30-150	A
DCAA	93		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 17:42
 Analyst: KEG
 Percent Solids: 89%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	186	11.7	1	A
2,4,5-T	ND		ug/kg	186	5.75	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.94	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	91		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03 D
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 13:54
 Analyst: KEG
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	35.1	6.87	20	A
Lindane	ND		ug/kg	14.6	6.53	20	A
Alpha-BHC	ND		ug/kg	14.6	4.15	20	A
Beta-BHC	ND		ug/kg	35.1	13.3	20	A
Heptachlor	ND		ug/kg	17.5	7.86	20	A
Aldrin	ND		ug/kg	35.1	12.3	20	A
Heptachlor epoxide	ND		ug/kg	65.7	19.7	20	A
Endrin	ND		ug/kg	14.6	5.99	20	A
Endrin aldehyde	ND		ug/kg	43.8	15.3	20	A
Endrin ketone	ND		ug/kg	35.1	9.03	20	A
Dieldrin	ND		ug/kg	21.9	11.0	20	A
4,4'-DDE	ND		ug/kg	35.1	8.11	20	A
4,4'-DDD	ND		ug/kg	35.1	12.5	20	A
4,4'-DDT	ND		ug/kg	65.7	28.2	20	A
Endosulfan I	ND		ug/kg	35.1	8.28	20	A
Endosulfan II	ND		ug/kg	35.1	11.7	20	A
Endosulfan sulfate	ND		ug/kg	14.6	6.95	20	A
Methoxychlor	ND		ug/kg	65.7	20.4	20	A
Toxaphene	ND		ug/kg	657	184.	20	A
cis-Chlordane	ND		ug/kg	43.8	12.2	20	A
trans-Chlordane	ND		ug/kg	43.8	11.6	20	A
Chlordane	ND		ug/kg	285	116.	20	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-03 D

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
 Client ID: RB05_19-21
 Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 18:01
 Analyst: KEG
 Percent Solids: 75%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	217	13.6	1	A
2,4,5-T	ND		ug/kg	217	6.72	1	A
2,4,5-TP (Silvex)	ND		ug/kg	217	5.76	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	124		30-150	A
DCAA	98		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04 D
 Client ID: RB05_19-21
 Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 14:07
 Analyst: KEG
 Percent Solids: 75%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	41.3	8.09	20	A
Lindane	ND		ug/kg	17.2	7.69	20	A
Alpha-BHC	ND		ug/kg	17.2	4.89	20	A
Beta-BHC	ND		ug/kg	41.3	15.7	20	A
Heptachlor	ND		ug/kg	20.6	9.26	20	A
Aldrin	ND		ug/kg	41.3	14.5	20	A
Heptachlor epoxide	ND		ug/kg	77.5	23.2	20	A
Endrin	ND		ug/kg	17.2	7.06	20	A
Endrin aldehyde	ND		ug/kg	51.6	18.1	20	A
Endrin ketone	ND		ug/kg	41.3	10.6	20	A
Dieldrin	ND		ug/kg	25.8	12.9	20	A
4,4'-DDE	ND		ug/kg	41.3	9.55	20	A
4,4'-DDD	ND		ug/kg	41.3	14.7	20	A
4,4'-DDT	ND		ug/kg	77.5	33.2	20	A
Endosulfan I	ND		ug/kg	41.3	9.76	20	A
Endosulfan II	ND		ug/kg	41.3	13.8	20	A
Endosulfan sulfate	ND		ug/kg	17.2	8.19	20	A
Methoxychlor	ND		ug/kg	77.5	24.1	20	A
Toxaphene	ND		ug/kg	775	217.	20	A
cis-Chlordane	ND		ug/kg	51.6	14.4	20	A
trans-Chlordane	ND		ug/kg	51.6	13.6	20	A
Chlordane	ND		ug/kg	336	137.	20	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-04 D

Date Collected: 12/21/18 10:00

Client ID: RB05_19-21

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 12:47
 Analyst: KEG
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.361	1	A
Lindane	ND		ug/kg	0.768	0.343	1	A
Alpha-BHC	ND		ug/kg	0.768	0.218	1	A
Beta-BHC	ND		ug/kg	1.84	0.699	1	A
Heptachlor	0.568	J	ug/kg	0.922	0.413	1	B
Aldrin	ND		ug/kg	1.84	0.649	1	A
Heptachlor epoxide	1.26	JIP	ug/kg	3.46	1.04	1	B
Endrin	ND		ug/kg	0.768	0.315	1	A
Endrin aldehyde	ND		ug/kg	2.30	0.807	1	A
Endrin ketone	ND		ug/kg	1.84	0.475	1	A
Dieldrin	ND		ug/kg	1.15	0.576	1	A
4,4'-DDE	101		ug/kg	1.84	0.426	1	A
4,4'-DDD	3.18	IP	ug/kg	1.84	0.658	1	A
4,4'-DDT	255	E	ug/kg	3.46	1.48	1	A
Endosulfan I	ND		ug/kg	1.84	0.436	1	A
Endosulfan II	ND		ug/kg	1.84	0.616	1	A
Endosulfan sulfate	ND		ug/kg	0.768	0.366	1	A
Methoxychlor	ND		ug/kg	3.46	1.08	1	A
Toxaphene	ND		ug/kg	34.6	9.68	1	A
cis-Chlordane	26.7	IP	ug/kg	2.30	0.642	1	B
trans-Chlordane	35.0	IP	ug/kg	2.30	0.608	1	A
Chlordane	ND		ug/kg	15.0	6.11	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	102		30-150	B
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	103		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 18:20
 Analyst: KEG
 Percent Solids: 87%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	188	11.8	1	A
2,4,5-T	ND		ug/kg	188	5.82	1	A
2,4,5-TP (Silvex)	ND		ug/kg	188	4.99	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	109		30-150	B

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-05 D

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8081B

Extraction Date: 12/24/18 02:47

Analytical Date: 01/03/19 13:29

Cleanup Method: EPA 3620B

Analyst: KEG

Cleanup Date: 12/27/18

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
4,4'-DDT	259		ug/kg	17.3	7.41	5	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 12:59
 Analyst: KEG
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.28	0.446	1	A
Lindane	ND		ug/kg	0.948	0.424	1	A
Alpha-BHC	ND		ug/kg	0.948	0.269	1	A
Beta-BHC	ND		ug/kg	2.28	0.863	1	A
Heptachlor	ND		ug/kg	1.14	0.510	1	A
Aldrin	ND		ug/kg	2.28	0.801	1	A
Heptachlor epoxide	ND	IP	ug/kg	4.27	1.28	1	B
Endrin	ND		ug/kg	0.948	0.389	1	A
Endrin aldehyde	ND		ug/kg	2.84	0.996	1	A
Endrin ketone	ND		ug/kg	2.28	0.586	1	A
Dieldrin	ND		ug/kg	1.42	0.711	1	A
4,4'-DDE	34.1		ug/kg	2.28	0.526	1	A
4,4'-DDD	1.42	J	ug/kg	2.28	0.812	1	B
4,4'-DDT	97.8		ug/kg	4.27	1.83	1	A
Endosulfan I	ND		ug/kg	2.28	0.538	1	A
Endosulfan II	ND		ug/kg	2.28	0.761	1	A
Endosulfan sulfate	ND		ug/kg	0.948	0.451	1	A
Methoxychlor	ND		ug/kg	4.27	1.33	1	A
Toxaphene	ND		ug/kg	42.7	12.0	1	A
cis-Chlordane	7.88	IP	ug/kg	2.84	0.793	1	B
trans-Chlordane	15.6	IP	ug/kg	2.84	0.751	1	A
Chlordane	ND		ug/kg	18.5	7.54	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-06

Date Collected: 12/21/18 12:40

Client ID: RB06_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	69		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	79		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 18:39
 Analyst: KEG
 Percent Solids: 89%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.70	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.90	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	115		30-150	A
DCAA	133		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 13:12
 Analyst: KEG
 Percent Solids: 69%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.31	0.452	1	A
Lindane	ND		ug/kg	0.962	0.430	1	A
Alpha-BHC	ND		ug/kg	0.962	0.273	1	A
Beta-BHC	ND		ug/kg	2.31	0.875	1	A
Heptachlor	ND		ug/kg	1.15	0.517	1	A
Aldrin	ND		ug/kg	2.31	0.813	1	A
Heptachlor epoxide	ND		ug/kg	4.33	1.30	1	A
Endrin	ND		ug/kg	0.962	0.394	1	A
Endrin aldehyde	ND		ug/kg	2.88	1.01	1	A
Endrin ketone	ND		ug/kg	2.31	0.594	1	A
Dieldrin	ND		ug/kg	1.44	0.721	1	A
4,4'-DDE	ND		ug/kg	2.31	0.534	1	A
4,4'-DDD	ND		ug/kg	2.31	0.823	1	A
4,4'-DDT	ND		ug/kg	4.33	1.86	1	A
Endosulfan I	ND		ug/kg	2.31	0.545	1	A
Endosulfan II	ND		ug/kg	2.31	0.771	1	A
Endosulfan sulfate	ND		ug/kg	0.962	0.458	1	A
Methoxychlor	ND		ug/kg	4.33	1.35	1	A
Toxaphene	ND		ug/kg	43.3	12.1	1	A
cis-Chlordane	ND		ug/kg	2.88	0.804	1	A
trans-Chlordane	ND		ug/kg	2.88	0.762	1	A
Chlordane	ND		ug/kg	18.8	7.64	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	55		30-150	B
2,4,5,6-Tetrachloro-m-xylene	131		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 19:16
 Analyst: KEG
 Percent Solids: 69%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	239	15.1	1	A
2,4,5-T	ND		ug/kg	239	7.42	1	A
2,4,5-TP (Silvex)	ND		ug/kg	239	6.36	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	116		30-150	A
DCAA	93		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 13:25
 Analyst: KEG
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.349	1	A
Lindane	ND		ug/kg	0.742	0.332	1	A
Alpha-BHC	ND		ug/kg	0.742	0.211	1	A
Beta-BHC	ND		ug/kg	1.78	0.676	1	A
Heptachlor	ND		ug/kg	0.891	0.399	1	A
Aldrin	ND		ug/kg	1.78	0.627	1	A
Heptachlor epoxide	1.03	JIP	ug/kg	3.34	1.00	1	B
Endrin	ND		ug/kg	0.742	0.304	1	A
Endrin aldehyde	ND		ug/kg	2.23	0.779	1	A
Endrin ketone	ND		ug/kg	1.78	0.459	1	A
Dieldrin	ND		ug/kg	1.11	0.557	1	A
4,4'-DDE	44.6		ug/kg	1.78	0.412	1	A
4,4'-DDD	2.64	IP	ug/kg	1.78	0.635	1	A
4,4'-DDT	156	E	ug/kg	3.34	1.43	1	A
Endosulfan I	ND		ug/kg	1.78	0.421	1	A
Endosulfan II	ND		ug/kg	1.78	0.595	1	A
Endosulfan sulfate	ND		ug/kg	0.742	0.353	1	A
Methoxychlor	ND		ug/kg	3.34	1.04	1	A
Toxaphene	ND		ug/kg	33.4	9.35	1	A
cis-Chlordane	16.1		ug/kg	2.23	0.620	1	A
trans-Chlordane	15.2	IP	ug/kg	2.23	0.588	1	A
Chlordane	ND		ug/kg	14.5	5.90	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-08

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	84		30-150	B
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	82		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 19:35
 Analyst: KEG
 Percent Solids: 89%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.68	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.87	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	83		30-150	A
DCAA	103		30-150	B

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-08 D

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8081B

Extraction Date: 12/24/18 02:47

Analytical Date: 01/03/19 13:42

Cleanup Method: EPA 3620B

Analyst: KEG

Cleanup Date: 12/27/18

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
4,4'-DDT	174		ug/kg	6.68	2.86	2	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 13:37
 Analyst: KEG
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.82	0.356	1	A
Lindane	ND		ug/kg	0.758	0.339	1	A
Alpha-BHC	ND		ug/kg	0.758	0.215	1	A
Beta-BHC	ND		ug/kg	1.82	0.690	1	A
Heptachlor	ND		ug/kg	0.910	0.408	1	A
Aldrin	ND		ug/kg	1.82	0.641	1	A
Heptachlor epoxide	ND		ug/kg	3.41	1.02	1	A
Endrin	ND		ug/kg	0.758	0.311	1	A
Endrin aldehyde	ND		ug/kg	2.28	0.796	1	A
Endrin ketone	ND		ug/kg	1.82	0.469	1	A
Dieldrin	ND		ug/kg	1.14	0.569	1	A
4,4'-DDE	ND		ug/kg	1.82	0.421	1	A
4,4'-DDD	ND		ug/kg	1.82	0.649	1	A
4,4'-DDT	ND		ug/kg	3.41	1.46	1	A
Endosulfan I	ND		ug/kg	1.82	0.430	1	A
Endosulfan II	ND		ug/kg	1.82	0.608	1	A
Endosulfan sulfate	ND		ug/kg	0.758	0.361	1	A
Methoxychlor	ND		ug/kg	3.41	1.06	1	A
Toxaphene	ND		ug/kg	34.1	9.56	1	A
cis-Chlordane	ND		ug/kg	2.28	0.634	1	A
trans-Chlordane	ND		ug/kg	2.28	0.601	1	A
Chlordane	ND		ug/kg	14.8	6.03	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-09

Date Collected: 12/21/18 13:40

Client ID: RB04_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	68		30-150	B
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 19:54
 Analyst: KEG
 Percent Solids: 88%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	186	11.7	1	A
2,4,5-T	ND		ug/kg	186	5.77	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	122		30-150	A
DCAA	100		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 20:13
 Analyst: KEG
 Percent Solids: 87%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	190	12.0	1	A
2,4,5-T	ND		ug/kg	190	5.90	1	A
2,4,5-TP (Silvex)	ND		ug/kg	190	5.06	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	159	Q	30-150	A
DCAA	127		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10 D
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 14:20
 Analyst: KEG
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	90.2	17.7	50	A
Lindane	ND		ug/kg	37.6	16.8	50	A
Alpha-BHC	ND		ug/kg	37.6	10.7	50	A
Beta-BHC	ND		ug/kg	90.2	34.2	50	A
Heptachlor	ND		ug/kg	45.1	20.2	50	A
Aldrin	ND		ug/kg	90.2	31.8	50	A
Heptachlor epoxide	ND		ug/kg	169	50.7	50	A
Endrin	ND		ug/kg	37.6	15.4	50	A
Endrin aldehyde	ND		ug/kg	113	39.5	50	A
Endrin ketone	ND		ug/kg	90.2	23.2	50	A
Dieldrin	ND		ug/kg	56.4	28.2	50	A
4,4'-DDE	ND		ug/kg	90.2	20.9	50	A
4,4'-DDD	ND		ug/kg	90.2	32.2	50	A
4,4'-DDT	ND		ug/kg	169	72.5	50	A
Endosulfan I	ND		ug/kg	90.2	21.3	50	A
Endosulfan II	ND		ug/kg	90.2	30.1	50	A
Endosulfan sulfate	ND		ug/kg	37.6	17.9	50	A
Methoxychlor	ND		ug/kg	169	52.6	50	A
Toxaphene	ND		ug/kg	1690	474.	50	A
cis-Chlordane	ND		ug/kg	113	31.4	50	A
trans-Chlordane	ND		ug/kg	113	29.8	50	A
Chlordane	ND		ug/kg	733	299.	50	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-10 D

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 14:03
 Analyst: KEG
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.95	0.381	1	A
Lindane	ND		ug/kg	0.811	0.362	1	A
Alpha-BHC	ND		ug/kg	0.811	0.230	1	A
Beta-BHC	ND		ug/kg	1.95	0.738	1	A
Heptachlor	ND		ug/kg	0.973	0.436	1	A
Aldrin	ND		ug/kg	1.95	0.685	1	A
Heptachlor epoxide	ND		ug/kg	3.65	1.09	1	A
Endrin	ND		ug/kg	0.811	0.332	1	A
Endrin aldehyde	ND		ug/kg	2.43	0.852	1	A
Endrin ketone	ND		ug/kg	1.95	0.501	1	A
Dieldrin	ND		ug/kg	1.22	0.608	1	A
4,4'-DDE	ND		ug/kg	1.95	0.450	1	A
4,4'-DDD	ND		ug/kg	1.95	0.694	1	A
4,4'-DDT	ND		ug/kg	3.65	1.56	1	A
Endosulfan I	ND		ug/kg	1.95	0.460	1	A
Endosulfan II	ND		ug/kg	1.95	0.650	1	A
Endosulfan sulfate	ND		ug/kg	0.811	0.386	1	A
Methoxychlor	ND		ug/kg	3.65	1.14	1	A
Toxaphene	ND		ug/kg	36.5	10.2	1	A
cis-Chlordane	ND		ug/kg	2.43	0.678	1	A
trans-Chlordane	ND		ug/kg	2.43	0.642	1	A
Chlordane	ND		ug/kg	15.8	6.45	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	59		30-150	B
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	62		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 20:32
 Analyst: KEG
 Percent Solids: 91%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	181	11.4	1	A
2,4,5-T	ND		ug/kg	181	5.62	1	A
2,4,5-TP (Silvex)	ND		ug/kg	181	4.82	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	110		30-150	A
DCAA	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 13:58
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 12/28/18 00:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	17	Q	30-150	A
Decachlorobiphenyl	13	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	17	Q	30-150	B
Decachlorobiphenyl	13	Q	30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/02/19 13:31
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 15:31

Methylation Date: 12/28/18 08:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	118		30-150	A
DCAA	92		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13 RE
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 18:00
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 09:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-13 RE

Date Collected: 12/21/18 14:45

Client ID: SOFB01_122118

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	71		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 20:51
 Analyst: KEG
 Percent Solids: 88%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	186	11.7	1	A
2,4,5-T	ND		ug/kg	186	5.78	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.96	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	129		30-150	A
DCAA	105		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14 D
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 14:32
 Analyst: KEG
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	89.6	17.5	50	A
Lindane	ND		ug/kg	37.3	16.7	50	A
Alpha-BHC	ND		ug/kg	37.3	10.6	50	A
Beta-BHC	ND		ug/kg	89.6	34.0	50	A
Heptachlor	ND		ug/kg	44.8	20.1	50	A
Aldrin	ND		ug/kg	89.6	31.5	50	A
Heptachlor epoxide	ND		ug/kg	168	50.4	50	A
Endrin	ND		ug/kg	37.3	15.3	50	A
Endrin aldehyde	ND		ug/kg	112	39.2	50	A
Endrin ketone	ND		ug/kg	89.6	23.1	50	A
Dieldrin	ND		ug/kg	56.0	28.0	50	A
4,4'-DDE	ND		ug/kg	89.6	20.7	50	A
4,4'-DDD	ND		ug/kg	89.6	31.9	50	A
4,4'-DDT	ND		ug/kg	168	72.0	50	A
Endosulfan I	ND		ug/kg	89.6	21.2	50	A
Endosulfan II	ND		ug/kg	89.6	29.9	50	A
Endosulfan sulfate	ND		ug/kg	37.3	17.8	50	A
Methoxychlor	ND		ug/kg	168	52.2	50	A
Toxaphene	ND		ug/kg	1680	470.	50	A
cis-Chlordane	ND		ug/kg	112	31.2	50	A
trans-Chlordane	ND		ug/kg	112	29.6	50	A
Chlordane	ND		ug/kg	728	297.	50	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-14 D

Date Collected: 12/21/18 14:00

Client ID: RB04_18-20

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 12/31/18 16:08
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Methylation Date: 12/24/18 07:26

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-11,14 Batch: WG1192478-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.01	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.30	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	0	Q	30-150	A
DCAA	0	Q	30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/27/18 22:15
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 12/24/18 02:47
Cleanup Method: EPA 3620B
Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-11,14 Batch: WG1192586-1						
Delta-BHC	ND		ug/kg	1.58	0.309	A
Lindane	ND		ug/kg	0.658	0.294	A
Alpha-BHC	ND		ug/kg	0.658	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.599	A
Heptachlor	ND		ug/kg	0.789	0.354	A
Aldrin	ND		ug/kg	1.58	0.556	A
Heptachlor epoxide	ND		ug/kg	2.96	0.888	A
Endrin	ND		ug/kg	0.658	0.270	A
Endrin aldehyde	ND		ug/kg	1.97	0.691	A
Endrin ketone	ND		ug/kg	1.58	0.406	A
Dieldrin	ND		ug/kg	0.987	0.493	A
4,4'-DDE	ND		ug/kg	1.58	0.365	A
4,4'-DDD	ND		ug/kg	1.58	0.563	A
4,4'-DDT	ND		ug/kg	2.96	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.373	A
Endosulfan II	ND		ug/kg	1.58	0.528	A
Endosulfan sulfate	ND		ug/kg	0.658	0.313	A
Methoxychlor	ND		ug/kg	2.96	0.921	A
Toxaphene	ND		ug/kg	29.6	8.29	A
cis-Chlordane	ND		ug/kg	1.97	0.550	A
trans-Chlordane	ND		ug/kg	1.97	0.521	A
Chlordane	ND		ug/kg	12.8	5.23	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 12/27/18 22:15
 Analyst: BM

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-11,14 Batch: WG1192586-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	71		30-150	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/02/19 12:35
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 15:31

Methylation Date: 12/28/18 08:56

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 13 Batch: WG1193192-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	116		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/03/19 13:20
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 12/28/18 00:37

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13 Batch: WG1193304-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**Analytical Method: 1,8081B
Analytical Date: 01/03/19 13:20
Analyst: BMExtraction Method: EPA 3510C
Extraction Date: 12/28/18 00:37

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13 Batch: WG1193304-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	A
Decachlorobiphenyl	45		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	47		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/30/18 17:22
Analyst: KEG

Extraction Method: EPA 3510C
Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13 Batch: WG1193824-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A
4,4'-DDT	0.025	JIP	ug/l	0.029	0.003	B

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 12/30/18 17:22
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13 Batch: WG1193824-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	61		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192478-2 WG1192478-3									
2,4-D	89		101		30-150	13		30	A
2,4,5-T	97		103		30-150	6		30	A
2,4,5-TP (Silvex)	85		89		30-150	5		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	91		98		30-150	A
DCAA	108		96		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192586-2 WG1192586-3									
Delta-BHC	94		91		30-150	3		30	A
Lindane	94		90		30-150	4		30	A
Alpha-BHC	99		85		30-150	15		30	A
Beta-BHC	98		97		30-150	1		30	A
Heptachlor	97		94		30-150	3		30	A
Aldrin	86		83		30-150	4		30	A
Heptachlor epoxide	91		88		30-150	3		30	A
Endrin	96		94		30-150	2		30	A
Endrin aldehyde	54		54		30-150	0		30	A
Endrin ketone	82		79		30-150	4		30	A
Dieldrin	99		97		30-150	2		30	A
4,4'-DDE	83		72		30-150	14		30	A
4,4'-DDD	82		85		30-150	4		30	A
4,4'-DDT	94		93		30-150	1		30	A
Endosulfan I	83		80		30-150	4		30	A
Endosulfan II	85		83		30-150	2		30	A
Endosulfan sulfate	66		65		30-150	2		30	A
Methoxychlor	96		95		30-150	1		30	A
cis-Chlordane	72		68		30-150	6		30	A
trans-Chlordane	56		66		30-150	16		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192586-2 WG1192586-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	83		81		30-150	B
Decachlorobiphenyl	82		82		30-150	B
2,4,5,6-Tetrachloro-m-xylene	76		76		30-150	A
Decachlorobiphenyl	79		77		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193192-2 WG1193192-3									
2,4-D	104		103		30-150	1		25	A
2,4,5-T	107		111		30-150	4		25	A
2,4,5-TP (Silvex)	101		100		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	115		115		30-150	A
DCAA	104		122		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193304-2 WG1193304-3									
Delta-BHC	64		62		30-150	3		20	A
Lindane	64		62		30-150	4		20	A
Alpha-BHC	75		73		30-150	2		20	A
Beta-BHC	70		70		30-150	1		20	A
Heptachlor	62		58		30-150	6		20	A
Aldrin	64		61		30-150	4		20	A
Heptachlor epoxide	66		64		30-150	3		20	A
Endrin	64		63		30-150	2		20	A
Endrin aldehyde	33		36		30-150	10		20	A
Endrin ketone	59		59		30-150	1		20	A
Dieldrin	69		68		30-150	2		20	A
4,4'-DDE	65		63		30-150	3		20	A
4,4'-DDD	64		62		30-150	2		20	A
4,4'-DDT	62		60		30-150	3		20	A
Endosulfan I	77		80		30-150	3		20	A
Endosulfan II	58		57		30-150	1		20	A
Endosulfan sulfate	52		52		30-150	1		20	A
Methoxychlor	69		67		30-150	3		20	A
cis-Chlordane	58		57		30-150	2		20	A
trans-Chlordane	65		64		30-150	2		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193304-2 WG1193304-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		51		30-150	A
Decachlorobiphenyl	24	Q	22	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		50		30-150	B
Decachlorobiphenyl	25	Q	25	Q	30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193824-2 WG1193824-3									
Delta-BHC	79		83		30-150	5		20	A
Lindane	78		83		30-150	6		20	A
Alpha-BHC	82		86		30-150	5		20	A
Beta-BHC	72		80		30-150	10		20	A
Heptachlor	72		76		30-150	6		20	A
Aldrin	76		80		30-150	5		20	A
Heptachlor epoxide	77		83		30-150	7		20	A
Endrin	78		82		30-150	6		20	A
Endrin aldehyde	74		78		30-150	5		20	A
Endrin ketone	79		82		30-150	4		20	A
Dieldrin	83		88		30-150	5		20	A
4,4'-DDE	76		82		30-150	7		20	A
4,4'-DDD	76		81		30-150	6		20	A
4,4'-DDT	78		84		30-150	8		20	A
Endosulfan I	74		78		30-150	6		20	A
Endosulfan II	73		77		30-150	5		20	A
Endosulfan sulfate	69		73		30-150	6		20	A
Methoxychlor	87		90		30-150	4		20	A
cis-Chlordane	66		67		30-150	0		20	A
trans-Chlordane	73		78		30-150	6		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193824-2 WG1193824-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	64		67		30-150	A
Decachlorobiphenyl	38		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		74		30-150	B
Decachlorobiphenyl	42		41		30-150	B

METALS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4080		mg/kg	8.79	2.37	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Antimony, Total	2.14	J	mg/kg	4.39	0.334	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Arsenic, Total	8.66		mg/kg	0.879	0.183	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Barium, Total	647		mg/kg	0.879	0.153	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Beryllium, Total	0.211	J	mg/kg	0.439	0.029	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Cadmium, Total	1.12		mg/kg	0.879	0.086	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Calcium, Total	61900		mg/kg	8.79	3.08	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Chromium, Total	19.1		mg/kg	0.879	0.084	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Cobalt, Total	4.34		mg/kg	1.76	0.146	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Copper, Total	73.5		mg/kg	0.879	0.227	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Iron, Total	10200		mg/kg	4.39	0.794	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Lead, Total	976		mg/kg	4.39	0.236	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Magnesium, Total	4850		mg/kg	8.79	1.35	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Manganese, Total	219		mg/kg	0.879	0.140	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Mercury, Total	0.514		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 20:37	EPA 7471B	1,7471B	EA
Nickel, Total	15.7		mg/kg	2.20	0.213	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Potassium, Total	830		mg/kg	220	12.6	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Selenium, Total	0.492	J	mg/kg	1.76	0.227	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.879	0.249	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Sodium, Total	360		mg/kg	176	2.77	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.76	0.277	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Vanadium, Total	27.3		mg/kg	0.879	0.178	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Zinc, Total	731		mg/kg	4.39	0.257	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	19		mg/kg	0.89	0.89	1		01/02/19 20:10	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02

Date Collected: 12/21/18 09:40

Client ID: RB05_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7460		mg/kg	8.90	2.40	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Antimony, Total	0.498	J	mg/kg	4.45	0.338	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Arsenic, Total	3.18		mg/kg	0.890	0.185	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Barium, Total	75.1		mg/kg	0.890	0.155	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Beryllium, Total	0.365	J	mg/kg	0.445	0.029	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Cadmium, Total	0.089	J	mg/kg	0.890	0.087	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Calcium, Total	14400		mg/kg	8.90	3.12	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Chromium, Total	35.2		mg/kg	0.890	0.086	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Cobalt, Total	8.17		mg/kg	1.78	0.148	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Copper, Total	188		mg/kg	0.890	0.230	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Iron, Total	13600		mg/kg	4.45	0.804	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Lead, Total	79.4		mg/kg	4.45	0.238	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Magnesium, Total	5980		mg/kg	8.90	1.37	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Manganese, Total	329		mg/kg	0.890	0.142	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Mercury, Total	0.688		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 20:39	EPA 7471B	1,7471B	EA
Nickel, Total	30.1		mg/kg	2.22	0.215	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Potassium, Total	2050		mg/kg	222	12.8	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.78	0.230	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.890	0.252	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Sodium, Total	121	J	mg/kg	178	2.80	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.78	0.280	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Vanadium, Total	21.4		mg/kg	0.890	0.181	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Zinc, Total	208		mg/kg	4.45	0.261	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	35		mg/kg	0.89	0.89	1		01/02/19 20:35	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-03

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6640		mg/kg	8.47	2.29	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Antimony, Total	0.712	J	mg/kg	4.24	0.322	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Arsenic, Total	4.26		mg/kg	0.847	0.176	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Barium, Total	96.2		mg/kg	0.847	0.147	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Beryllium, Total	0.322	J	mg/kg	0.424	0.028	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.847	0.083	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Calcium, Total	7990		mg/kg	8.47	2.96	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Chromium, Total	16.3		mg/kg	0.847	0.081	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Cobalt, Total	8.39		mg/kg	1.69	0.141	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Copper, Total	26.3		mg/kg	0.847	0.218	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Iron, Total	17200		mg/kg	4.24	0.765	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Lead, Total	191		mg/kg	4.24	0.227	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Magnesium, Total	3230		mg/kg	8.47	1.30	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Manganese, Total	160		mg/kg	0.847	0.135	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Mercury, Total	1.11		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 20:41	EPA 7471B	1,7471B	EA
Nickel, Total	16.0		mg/kg	2.12	0.205	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Potassium, Total	2310		mg/kg	212	12.2	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Selenium, Total	0.788	J	mg/kg	1.69	0.218	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.847	0.240	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Sodium, Total	77.0	J	mg/kg	169	2.67	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.69	0.267	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Vanadium, Total	20.2		mg/kg	0.847	0.172	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Zinc, Total	103		mg/kg	4.24	0.248	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	16		mg/kg	0.90	0.90	1		01/02/19 20:39	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-04

Date Collected: 12/21/18 10:00

Client ID: RB05_19-21

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6400		mg/kg	10.3	2.78	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Antimony, Total	1.45	J	mg/kg	5.16	0.392	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Arsenic, Total	7.68		mg/kg	1.03	0.214	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Barium, Total	101		mg/kg	1.03	0.180	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Beryllium, Total	0.330	J	mg/kg	0.516	0.034	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	1.03	0.101	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Calcium, Total	5060		mg/kg	10.3	3.61	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Chromium, Total	14.4		mg/kg	1.03	0.099	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Cobalt, Total	7.59		mg/kg	2.06	0.171	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Copper, Total	227		mg/kg	1.03	0.266	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Iron, Total	14200		mg/kg	5.16	0.932	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Lead, Total	268		mg/kg	5.16	0.276	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Magnesium, Total	2630		mg/kg	10.3	1.59	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Manganese, Total	163		mg/kg	1.03	0.164	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Mercury, Total	1.12		mg/kg	0.084	0.018	1	12/27/18 07:30	01/02/19 20:47	EPA 7471B	1,7471B	EA
Nickel, Total	13.6		mg/kg	2.58	0.250	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Potassium, Total	1640		mg/kg	258	14.8	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Selenium, Total	0.836	J	mg/kg	2.06	0.266	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	1.03	0.292	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Sodium, Total	128	J	mg/kg	206	3.25	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	2.06	0.325	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Vanadium, Total	20.6		mg/kg	1.03	0.209	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Zinc, Total	130		mg/kg	5.16	0.302	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	1.1	1.1	1		01/02/19 20:44	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2970		mg/kg	9.01	2.43	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Antimony, Total	5.01		mg/kg	4.50	0.342	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Arsenic, Total	7.39		mg/kg	0.901	0.187	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Barium, Total	826		mg/kg	0.901	0.157	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Beryllium, Total	0.153	J	mg/kg	0.450	0.030	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Cadmium, Total	0.955		mg/kg	0.901	0.088	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Calcium, Total	56400		mg/kg	9.01	3.15	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Chromium, Total	11.4		mg/kg	0.901	0.087	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Cobalt, Total	3.08		mg/kg	1.80	0.150	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Copper, Total	14.2		mg/kg	0.901	0.232	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Iron, Total	5920		mg/kg	4.50	0.813	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Lead, Total	1120		mg/kg	4.50	0.241	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Magnesium, Total	4070		mg/kg	9.01	1.39	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Manganese, Total	163		mg/kg	0.901	0.143	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Mercury, Total	0.417		mg/kg	0.073	0.015	1	12/27/18 07:30	01/02/19 20:49	EPA 7471B	1,7471B	EA
Nickel, Total	5.39		mg/kg	2.25	0.218	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Potassium, Total	644		mg/kg	225	13.0	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Selenium, Total	0.333	J	mg/kg	1.80	0.232	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.901	0.255	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Sodium, Total	373		mg/kg	180	2.84	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.80	0.284	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Vanadium, Total	14.8		mg/kg	0.901	0.183	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Zinc, Total	1190		mg/kg	4.50	0.264	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11	J	mg/kg	0.92	0.92	1		01/02/19 21:11	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-06

Date Collected: 12/21/18 12:40

Client ID: RB06_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5760		mg/kg	8.72	2.35	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Antimony, Total	1.01	J	mg/kg	4.36	0.331	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Arsenic, Total	7.04		mg/kg	0.872	0.181	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Barium, Total	91.5		mg/kg	0.872	0.152	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Beryllium, Total	0.331	J	mg/kg	0.436	0.029	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.872	0.085	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Calcium, Total	16900		mg/kg	8.72	3.05	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Chromium, Total	11.4		mg/kg	0.872	0.084	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Cobalt, Total	5.54		mg/kg	1.74	0.145	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Copper, Total	37.1		mg/kg	0.872	0.225	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Iron, Total	11400		mg/kg	4.36	0.787	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Lead, Total	539		mg/kg	4.36	0.234	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Magnesium, Total	2300		mg/kg	8.72	1.34	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Manganese, Total	245		mg/kg	0.872	0.139	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Mercury, Total	1.12		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 20:51	EPA 7471B	1,7471B	EA
Nickel, Total	15.8		mg/kg	2.18	0.211	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Potassium, Total	599		mg/kg	218	12.6	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Selenium, Total	0.331	J	mg/kg	1.74	0.225	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.872	0.247	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Sodium, Total	125	J	mg/kg	174	2.75	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.74	0.275	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Vanadium, Total	13.7		mg/kg	0.872	0.177	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Zinc, Total	114		mg/kg	4.36	0.255	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11	J	mg/kg	0.90	0.90	1		01/02/19 21:16	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07

Date Collected: 12/21/18 12:50

Client ID: RB06_10-12

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 69%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	11200		mg/kg	11.5	3.10	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Antimony, Total	1.18	J	mg/kg	5.73	0.436	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Arsenic, Total	8.60		mg/kg	1.15	0.238	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Barium, Total	22.9		mg/kg	1.15	0.200	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Beryllium, Total	0.585		mg/kg	0.573	0.038	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	1.15	0.112	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Calcium, Total	2200		mg/kg	11.5	4.01	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Chromium, Total	22.9		mg/kg	1.15	0.110	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Cobalt, Total	9.16		mg/kg	2.29	0.190	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Copper, Total	9.15		mg/kg	1.15	0.296	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Iron, Total	23700		mg/kg	5.73	1.04	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Lead, Total	10.9		mg/kg	5.73	0.307	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Magnesium, Total	5660		mg/kg	11.5	1.77	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Manganese, Total	254		mg/kg	1.15	0.182	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.092	0.019	1	12/27/18 07:30	01/02/19 20:52	EPA 7471B	1,7471B	EA
Nickel, Total	18.8		mg/kg	2.87	0.278	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Potassium, Total	2390		mg/kg	287	16.5	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Selenium, Total	0.367	J	mg/kg	2.29	0.296	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	1.15	0.324	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Sodium, Total	233		mg/kg	229	3.61	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	2.29	0.361	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Vanadium, Total	29.0		mg/kg	1.15	0.233	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Zinc, Total	59.2		mg/kg	5.73	0.336	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	23		mg/kg	1.2	1.2	1		01/02/19 21:20	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6460		mg/kg	8.82	2.38	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Antimony, Total	1.68	J	mg/kg	4.41	0.335	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Arsenic, Total	9.85		mg/kg	0.882	0.183	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Barium, Total	282		mg/kg	0.882	0.153	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Beryllium, Total	0.362	J	mg/kg	0.441	0.029	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.882	0.086	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Calcium, Total	39500		mg/kg	8.82	3.09	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Chromium, Total	12.7		mg/kg	0.882	0.085	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Cobalt, Total	6.49		mg/kg	1.76	0.146	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Copper, Total	18.5		mg/kg	0.882	0.228	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Iron, Total	12300		mg/kg	4.41	0.796	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Lead, Total	294		mg/kg	4.41	0.236	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Magnesium, Total	4440		mg/kg	8.82	1.36	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Manganese, Total	205		mg/kg	0.882	0.140	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Mercury, Total	0.506		mg/kg	0.071	0.015	1	12/27/18 07:30	01/02/19 20:54	EPA 7471B	1,7471B	EA
Nickel, Total	12.2		mg/kg	2.20	0.213	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Potassium, Total	1710		mg/kg	220	12.7	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Selenium, Total	0.494	J	mg/kg	1.76	0.228	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.882	0.250	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Sodium, Total	503		mg/kg	176	2.78	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.76	0.278	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Vanadium, Total	18.3		mg/kg	0.882	0.179	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Zinc, Total	476		mg/kg	4.41	0.258	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	13		mg/kg	0.90	0.90	1		01/02/19 21:24	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09

Date Collected: 12/21/18 13:40

Client ID: RB04_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6810		mg/kg	9.00	2.43	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Antimony, Total	0.774	J	mg/kg	4.50	0.342	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Arsenic, Total	3.56		mg/kg	0.900	0.187	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Barium, Total	49.8		mg/kg	0.900	0.157	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Beryllium, Total	0.324	J	mg/kg	0.450	0.030	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.900	0.088	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Calcium, Total	13600		mg/kg	9.00	3.15	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Chromium, Total	12.9		mg/kg	0.900	0.086	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Cobalt, Total	7.64		mg/kg	1.80	0.149	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Copper, Total	18.4		mg/kg	0.900	0.232	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Iron, Total	16700		mg/kg	4.50	0.813	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Lead, Total	72.0		mg/kg	4.50	0.241	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Magnesium, Total	8370		mg/kg	9.00	1.39	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Manganese, Total	284		mg/kg	0.900	0.143	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Mercury, Total	0.639		mg/kg	0.072	0.015	1	12/27/18 07:30	01/02/19 20:56	EPA 7471B	1,7471B	EA
Nickel, Total	12.5		mg/kg	2.25	0.218	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Potassium, Total	1210		mg/kg	225	13.0	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.80	0.232	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.900	0.255	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Sodium, Total	166	J	mg/kg	180	2.84	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.80	0.284	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Vanadium, Total	18.6		mg/kg	0.900	0.183	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Zinc, Total	129		mg/kg	4.50	0.264	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	13		mg/kg	0.91	0.91	1		01/02/19 21:28	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6240		mg/kg	9.14	2.47	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Antimony, Total	0.411	J	mg/kg	4.57	0.347	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Arsenic, Total	3.11		mg/kg	0.914	0.190	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Barium, Total	94.4		mg/kg	0.914	0.159	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Beryllium, Total	0.283	J	mg/kg	0.457	0.030	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.914	0.090	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Calcium, Total	18900		mg/kg	9.14	3.20	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Chromium, Total	14.0		mg/kg	0.914	0.088	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Cobalt, Total	6.24		mg/kg	1.83	0.152	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Copper, Total	19.9		mg/kg	0.914	0.236	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Iron, Total	13800		mg/kg	4.57	0.826	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Lead, Total	57.5		mg/kg	4.57	0.245	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Magnesium, Total	4830		mg/kg	9.14	1.41	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Manganese, Total	295		mg/kg	0.914	0.145	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Mercury, Total	0.553		mg/kg	0.072	0.015	1	12/27/18 07:30	01/02/19 20:58	EPA 7471B	1,7471B	EA
Nickel, Total	11.1		mg/kg	2.28	0.221	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Potassium, Total	1720		mg/kg	228	13.2	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Selenium, Total	0.247	J	mg/kg	1.83	0.236	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.914	0.259	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Sodium, Total	164	J	mg/kg	183	2.88	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.83	0.288	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Vanadium, Total	15.0		mg/kg	0.914	0.186	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Zinc, Total	67.8		mg/kg	4.57	0.268	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	0.92	0.92	1		01/02/19 21:32	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4850		mg/kg	8.60	2.32	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Antimony, Total	0.550	J	mg/kg	4.30	0.327	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Arsenic, Total	1.90		mg/kg	0.860	0.179	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Barium, Total	32.8		mg/kg	0.860	0.150	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Beryllium, Total	0.241	J	mg/kg	0.430	0.028	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.860	0.084	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Calcium, Total	9970		mg/kg	8.60	3.01	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Chromium, Total	10.6		mg/kg	0.860	0.083	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Cobalt, Total	6.15		mg/kg	1.72	0.143	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Copper, Total	28.4		mg/kg	0.860	0.222	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Iron, Total	11900		mg/kg	4.30	0.776	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Lead, Total	32.5		mg/kg	4.30	0.230	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Magnesium, Total	6470		mg/kg	8.60	1.32	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Manganese, Total	205		mg/kg	0.860	0.137	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Mercury, Total	0.277		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 21:00	EPA 7471B	1,7471B	EA
Nickel, Total	8.80		mg/kg	2.15	0.208	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Potassium, Total	1020		mg/kg	215	12.4	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.72	0.222	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.860	0.243	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Sodium, Total	137	J	mg/kg	172	2.71	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.72	0.271	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Vanadium, Total	16.1		mg/kg	0.860	0.174	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Zinc, Total	39.9		mg/kg	4.30	0.252	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	10	J	mg/kg	0.88	0.88	1		01/02/19 21:36	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.100	0.032	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Antimony, Total	ND		mg/l	0.050	0.007	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Arsenic, Total	ND		mg/l	0.005	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Barium, Total	0.002	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Beryllium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Cadmium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Calcium, Total	ND		mg/l	0.100	0.035	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Chromium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Cobalt, Total	ND		mg/l	0.020	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Copper, Total	0.003	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Iron, Total	ND		mg/l	0.050	0.009	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Lead, Total	ND		mg/l	0.010	0.003	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Magnesium, Total	ND		mg/l	0.100	0.015	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Manganese, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/02/19 11:01	01/02/19 16:46	EPA 7470A	1,7470A	MG
Nickel, Total	ND		mg/l	0.025	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Potassium, Total	ND		mg/l	2.50	0.237	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Selenium, Total	ND		mg/l	0.010	0.004	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Silver, Total	ND		mg/l	0.007	0.003	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Sodium, Total	ND		mg/l	2.00	0.120	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Thallium, Total	ND		mg/l	0.020	0.003	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Vanadium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Zinc, Total	ND		mg/l	0.050	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/03/19 09:33	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-14

Date Collected: 12/21/18 14:00

Client ID: RB04_18-20

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5930		mg/kg	8.79	2.37	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.40	0.334	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Arsenic, Total	2.52		mg/kg	0.879	0.183	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Barium, Total	58.2		mg/kg	0.879	0.153	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Beryllium, Total	0.211	J	mg/kg	0.440	0.029	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.879	0.086	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Calcium, Total	14600		mg/kg	8.79	3.08	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Chromium, Total	11.4		mg/kg	0.879	0.084	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Cobalt, Total	7.18		mg/kg	1.76	0.146	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Copper, Total	18.4		mg/kg	0.879	0.227	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Iron, Total	11400		mg/kg	4.40	0.794	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Lead, Total	52.2		mg/kg	4.40	0.236	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Magnesium, Total	4470		mg/kg	8.79	1.35	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Manganese, Total	269		mg/kg	0.879	0.140	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Mercury, Total	0.242		mg/kg	0.072	0.015	1	12/27/18 07:30	01/02/19 21:02	EPA 7471B	1,7471B	EA
Nickel, Total	11.6		mg/kg	2.20	0.213	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Potassium, Total	2540		mg/kg	220	12.7	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Selenium, Total	0.325	J	mg/kg	1.76	0.227	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.879	0.249	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Sodium, Total	205		mg/kg	176	2.77	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.76	0.277	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Vanadium, Total	15.5		mg/kg	0.879	0.178	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Zinc, Total	43.4		mg/kg	4.40	0.258	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.91	0.91	1		01/02/19 21:41	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11,14 Batch: WG1192962-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	12/27/18 07:30	01/02/19 20:10	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 01-11,14 Batch: WG1193229-1										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Antimony, Total	ND	mg/kg	2.00	0.152	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Barium, Total	ND	mg/kg	0.400	0.070	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Calcium, Total	ND	mg/kg	4.00	1.40	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Chromium, Total	ND	mg/kg	0.400	0.038	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Cobalt, Total	ND	mg/kg	0.800	0.066	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Copper, Total	ND	mg/kg	0.400	0.103	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Iron, Total	0.672	J	mg/kg	2.00	0.361	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Manganese, Total	ND	mg/kg	0.400	0.064	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Nickel, Total	ND	mg/kg	1.00	0.097	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Potassium, Total	ND	mg/kg	100	5.76	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Selenium, Total	ND	mg/kg	0.800	0.103	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Silver, Total	ND	mg/kg	0.400	0.113	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Sodium, Total	ND	mg/kg	80.0	1.26	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Thallium, Total	ND	mg/kg	0.800	0.126	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Zinc, Total	ND	mg/kg	2.00	0.117	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 13 Batch: WG1193992-1									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	01/02/19 11:01	01/02/19 16:42	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 13 Batch: WG1194043-1										
Aluminum, Total	ND	mg/l	0.100	0.032	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Antimony, Total	ND	mg/l	0.050	0.007	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Arsenic, Total	ND	mg/l	0.005	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Barium, Total	ND	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Beryllium, Total	ND	mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Cadmium, Total	ND	mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Calcium, Total	ND	mg/l	0.100	0.035	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Chromium, Total	ND	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Cobalt, Total	ND	mg/l	0.020	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Copper, Total	0.004	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Iron, Total	ND	mg/l	0.050	0.009	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Lead, Total	ND	mg/l	0.010	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Magnesium, Total	ND	mg/l	0.100	0.015	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Manganese, Total	ND	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Nickel, Total	ND	mg/l	0.025	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Potassium, Total	ND	mg/l	2.50	0.237	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Selenium, Total	ND	mg/l	0.010	0.004	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Silver, Total	ND	mg/l	0.007	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Sodium, Total	ND	mg/l	2.00	0.120	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Thallium, Total	ND	mg/l	0.020	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Vanadium, Total	ND	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Zinc, Total	ND	mg/l	0.050	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
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Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 Batch: WG1192962-2 SRM Lot Number: D102-540								
Mercury, Total	108		-		65-134	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 Batch: WG1193229-2 SRM Lot Number: D102-540					
Aluminum, Total	67	-	49-150	-	
Antimony, Total	123	-	1-199	-	
Arsenic, Total	92	-	83-117	-	
Barium, Total	87	-	83-118	-	
Beryllium, Total	90	-	83-116	-	
Cadmium, Total	92	-	83-118	-	
Calcium, Total	82	-	82-118	-	
Chromium, Total	83	-	83-117	-	
Cobalt, Total	90	-	84-116	-	
Copper, Total	88	-	84-116	-	
Iron, Total	78	-	61-139	-	
Lead, Total	83	-	82-118	-	
Magnesium, Total	81	-	76-124	-	
Manganese, Total	82	-	82-118	-	
Nickel, Total	86	-	83-117	-	
Potassium, Total	82	-	70-130	-	
Selenium, Total	91	-	79-121	-	
Silver, Total	86	-	80-120	-	
Sodium, Total	102	-	74-126	-	
Thallium, Total	98	-	81-119	-	
Vanadium, Total	84	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 Batch: WG1193229-2 SRM Lot Number: D102-540					
Zinc, Total	87	-	81-118	-	
Total Metals - Mansfield Lab Associated sample(s): 13 Batch: WG1193992-2					
Mercury, Total	94	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 Batch: WG1194043-2					
Aluminum, Total	111	-	80-120	-	
Antimony, Total	98	-	80-120	-	
Arsenic, Total	115	-	80-120	-	
Barium, Total	105	-	80-120	-	
Beryllium, Total	104	-	80-120	-	
Cadmium, Total	111	-	80-120	-	
Calcium, Total	108	-	80-120	-	
Chromium, Total	104	-	80-120	-	
Cobalt, Total	103	-	80-120	-	
Copper, Total	102	-	80-120	-	
Iron, Total	112	-	80-120	-	
Lead, Total	110	-	80-120	-	
Magnesium, Total	112	-	80-120	-	
Manganese, Total	102	-	80-120	-	
Nickel, Total	104	-	80-120	-	
Potassium, Total	109	-	80-120	-	
Selenium, Total	118	-	80-120	-	
Silver, Total	110	-	80-120	-	
Sodium, Total	115	-	80-120	-	
Thallium, Total	109	-	80-120	-	
Vanadium, Total	107	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 Batch: WG1194043-2					
Zinc, Total	110	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MS Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1192962-3 QC Sample: L1852815-01 Client ID: MS Sample												
Mercury, Total	0.298	0.18	0.575	154	Q	-	-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1193229-3 QC Sample: L1852926-01 Client ID: RB05_0-2									
Aluminum, Total	4080	176	4120	23	Q	-	75-125	-	20
Antimony, Total	2.14J	44	38.2	87		-	75-125	-	20
Arsenic, Total	8.66	10.6	19.3	101		-	75-125	-	20
Barium, Total	647	176	1210	320	Q	-	75-125	-	20
Beryllium, Total	0.211J	4.4	4.28	97		-	75-125	-	20
Cadmium, Total	1.12	4.49	5.37	95		-	75-125	-	20
Calcium, Total	61900	881	70600	988	Q	-	75-125	-	20
Chromium, Total	19.1	17.6	39.4	115		-	75-125	-	20
Cobalt, Total	4.34	44	43.2	88		-	75-125	-	20
Copper, Total	73.5	22	90.6	78		-	75-125	-	20
Iron, Total	10200	88.1	9020	0	Q	-	75-125	-	20
Lead, Total	976	44.9	1740	1700	Q	-	75-125	-	20
Magnesium, Total	4850	881	5480	72	Q	-	75-125	-	20
Manganese, Total	219	44	291	163	Q	-	75-125	-	20
Nickel, Total	15.7	44	48.8	75		-	75-125	-	20
Potassium, Total	830	881	1720	101		-	75-125	-	20
Selenium, Total	0.492J	10.6	10.5	99		-	75-125	-	20
Silver, Total	ND	26.4	28.1	106		-	75-125	-	20
Sodium, Total	360	881	1190	94		-	75-125	-	20
Thallium, Total	ND	10.6	8.19	77		-	75-125	-	20
Vanadium, Total	27.3	44	69.0	95		-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1193229-3 QC Sample: L1852926-01 Client ID: RB05_0-2									
Zinc, Total	731	44	940	474	Q	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1193992-3 QC Sample: L1852926-13 Client ID: SOFB01_122118									
Mercury, Total	ND	0.005	0.00431	86	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1194043-3 QC Sample: L1852881-01 Client ID: MS Sample									
Aluminum, Total	0.139	2	2.39	112	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.523	105	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.138	115	-	-	75-125	-	20
Barium, Total	0.004J	2	2.13	106	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.053	106	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.057	112	-	-	75-125	-	20
Calcium, Total	7.51	10	19.2	117	-	-	75-125	-	20
Chromium, Total	ND	0.2	0.212	106	-	-	75-125	-	20
Cobalt, Total	0.002J	0.5	0.523	105	-	-	75-125	-	20
Copper, Total	0.005J	0.25	0.261	104	-	-	75-125	-	20
Iron, Total	0.151	1	1.29	114	-	-	75-125	-	20
Lead, Total	ND	0.51	0.562	110	-	-	75-125	-	20
Magnesium, Total	1.50	10	12.7	112	-	-	75-125	-	20
Manganese, Total	0.018	0.5	0.530	102	-	-	75-125	-	20
Nickel, Total	0.007J	0.5	0.529	106	-	-	75-125	-	20
Potassium, Total	0.529J	10	11.4	114	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.142	118	-	-	75-125	-	20
Silver, Total	ND	0.05	0.054	108	-	-	75-125	-	20
Sodium, Total	2.04	10	13.4	114	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.131	109	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.539	108	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1194043-3 QC Sample: L1852881-01 Client ID: MS Sample									
Zinc, Total	0.010J	0.5	0.566	113	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1192962-4 QC Sample: L1852815-01 Client ID: DUP Sample						
Mercury, Total	0.298	0.305	mg/kg	2		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1193229-4 QC Sample: L1852926-01 Client ID: RB05_0-2					
Aluminum, Total	4080	4010	mg/kg	2	20
Antimony, Total	2.14J	2.12J	mg/kg	NC	20
Arsenic, Total	8.66	8.07	mg/kg	7	20
Barium, Total	647	540	mg/kg	18	20
Beryllium, Total	0.211J	0.208J	mg/kg	NC	20
Cadmium, Total	1.12	1.08	mg/kg	4	20
Calcium, Total	61900	63200	mg/kg	2	20
Chromium, Total	19.1	17.6	mg/kg	8	20
Cobalt, Total	4.34	4.64	mg/kg	7	20
Copper, Total	73.5	68.8	mg/kg	7	20
Iron, Total	10200	12700	mg/kg	22	Q 20
Lead, Total	976	876	mg/kg	11	20
Magnesium, Total	4850	5510	mg/kg	13	20
Manganese, Total	219	234	mg/kg	7	20
Nickel, Total	15.7	13.7	mg/kg	14	20
Potassium, Total	830	866	mg/kg	4	20
Selenium, Total	0.492J	0.659J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	360	343	mg/kg	5	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1193229-4 QC Sample: L1852926-01 Client ID: RB05_0-2					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	27.3	27.2	mg/kg	0	20
Zinc, Total	731	761	mg/kg	4	20
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1193992-4 QC Sample: L1852926-13 Client ID: SOFB01_122118					
Mercury, Total	ND	ND	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1194043-4 QC Sample: L1852881-01 Client ID: DUP Sample					
Iron, Total	0.151	0.154	mg/l	2	20
Manganese, Total	0.018	0.019	mg/l	2	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.1		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.34	J	mg/kg	1.1	0.23	1	12/22/18 16:10	12/26/18 14:42	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.888	0.178	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02

Date Collected: 12/21/18 09:40

Client ID: RB05_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.5		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	12/22/18 16:10	12/26/18 14:53	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.894	0.179	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.3		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/22/18 16:10	12/26/18 14:54	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.896	0.179	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04

Date Collected: 12/21/18 10:00

Client ID: RB05_19-21

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	75.2		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.3	0.27	1	12/22/18 16:10	12/26/18 14:55	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.06	0.213	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.6		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.92	J	mg/kg	1.1	0.24	1	12/22/18 16:10	12/26/18 14:56	1,9010C/9012B	LH
Chromium, Hexavalent	0.716	J	mg/kg	0.924	0.185	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-06

Date Collected: 12/21/18 12:40

Client ID: RB06_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.2		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	1.1		mg/kg	1.0	0.22	1	12/22/18 16:10	12/26/18 14:57	1,9010C/9012B	LH
Chromium, Hexavalent	0.190	J	mg/kg	0.897	0.179	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07

Date Collected: 12/21/18 12:50

Client ID: RB06_10-12

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	68.5		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.4	0.30	1	12/22/18 16:10	12/26/18 14:58	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.17	0.234	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-08

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.8		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.35	J	mg/kg	1.1	0.24	1	12/22/18 16:10	12/26/18 15:14	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.901	0.180	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09

Date Collected: 12/21/18 13:40

Client ID: RB04_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.6		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/26/18 11:10	12/27/18 12:37	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.913	0.183	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.6		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.39	J	mg/kg	1.1	0.24	1	12/26/18 11:10	12/27/18 12:04	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.924	0.185	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11

Date Collected: 12/21/18 00:00

Client ID: SODUP01_122118

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.8		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/26/18 11:10	12/27/18 12:05	1,9010C/9012B	LH
Chromium, Hexavalent	0.430	J	mg/kg	0.881	0.176	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-13

Date Collected: 12/21/18 14:45

Client ID: SOFB01_122118

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/22/18 12:15	12/26/18 12:28	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	12/22/18 07:45	12/22/18 08:00	1,7196A	MA



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14

Date Collected: 12/21/18 14:00

Client ID: RB04_18-20

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.8		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.25	J	mg/kg	1.1	0.22	1	12/26/18 11:10	12/27/18 12:06	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.911	0.182	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 13 Batch: WG1192356-1									
Chromium, Hexavalent	ND	mg/l	0.010	0.003	1	12/22/18 07:45	12/22/18 08:00	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 13 Batch: WG1192406-1									
Cyanide, Total	ND	mg/l	0.005	0.001	1	12/22/18 12:15	12/26/18 12:04	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG1192428-1									
Cyanide, Total	ND	mg/kg	0.92	0.20	1	12/22/18 12:55	12/26/18 14:13	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 09-11,14 Batch: WG1192704-1									
Cyanide, Total	ND	mg/kg	0.84	0.18	1	12/26/18 11:10	12/27/18 11:46	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG1192810-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH
General Chemistry - Westborough Lab for sample(s): 11,14 Batch: WG1192812-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 13 Batch: WG1192356-2								
Chromium, Hexavalent	92		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 13 Batch: WG1192406-2 WG1192406-3								
Cyanide, Total	95		96		85-115	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG1192428-2 WG1192428-3								
Cyanide, Total	73	Q	78	Q	80-120	4		35
General Chemistry - Westborough Lab Associated sample(s): 09-11,14 Batch: WG1192704-2 WG1192704-3								
Cyanide, Total	81		72	Q	80-120	11		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1192810-2								
Chromium, Hexavalent	83		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 11,14 Batch: WG1192812-2								
Chromium, Hexavalent	83		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 13 QC Batch ID: WG1192356-4 QC Sample: L1852926-13 Client ID: SOFB01_122118												
Chromium, Hexavalent	ND	0.1	0.095	95	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 13 QC Batch ID: WG1192406-4 WG1192406-5 QC Sample: L1852588-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.184	92	0.187	94	94	80-120	2	2	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1192428-4 WG1192428-5 QC Sample: L1852926-01 Client ID: RB05_0-2												
Cyanide, Total	0.34J	10	11	100	10	91	91	75-125	10	10	-	35
General Chemistry - Westborough Lab Associated sample(s): 09-11,14 QC Batch ID: WG1192704-4 WG1192704-5 QC Sample: L1852926-09 Client ID: RB04_8-10												
Cyanide, Total	ND	11	11	98	10	88	88	75-125	10	10	-	35
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1192810-4 QC Sample: L1852926-10 Client ID: RB04_13-15												
Chromium, Hexavalent	ND	1400	ND	0	Q	-	-	-	75-125	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 11,14 QC Batch ID: WG1192812-4 QC Sample: L1852926-14 Client ID: RB04_18-20												
Chromium, Hexavalent	ND	1040	830	80	-	-	-	-	75-125	-	-	20



Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 13 QC Batch ID: WG1192356-3 QC Sample: L1852926-13 Client ID: SOFB01_122118						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-11,14 QC Batch ID: WG1192773-1 QC Sample: L1852926-01 Client ID: RB05_0-2						
Solids, Total	90.1	91.0	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1192810-6 QC Sample: L1852926-10 Client ID: RB04_13-15						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 11,14 QC Batch ID: WG1192812-6 QC Sample: L1852926-14 Client ID: RB04_18-20						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-01A	Vial MeOH preserved	B	NA		4.8	Y	Absent		NYTCL-8260HLW(14)
L1852926-01B	Vial water preserved	B	NA		4.8	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-01C	Vial water preserved	B	NA		4.8	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-01D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-01F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-01G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-02A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-02B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-02C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-02D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-02F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-02G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-03A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-03B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-03C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-03D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-03E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-03F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-03G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-04A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-04B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-04C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-04D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-04F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-04G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-05A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-05B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-05C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-05D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-05E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-05F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-05G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-06A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-06B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-06C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-06D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-06F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-06G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-07A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-07B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-07C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-07D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-07F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-07G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-08A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-08B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-08C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-08D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-08E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-08F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-08G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-09A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-09B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-09C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-09D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-09E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-09F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-09G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-10A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-10B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-10C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-10D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-10E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-10F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-10G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-11A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-11B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-11C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-11D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-11E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-11F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-11G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-12A	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-12B	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-13A	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-13B	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-13C	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-13D	Plastic 500ml HNO3 preserved	B	<2	<2	4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-13E	Plastic 250ml NaOH preserved	B	7	7	4.8	Y	Absent		TCN-9010(14)
L1852926-13F	Plastic 500ml unpreserved	B	7	7	4.8	Y	Absent		HEXCR-7196(1)
L1852926-13G	Glass 120ml/4oz unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8081(7)
L1852926-13H	Glass 120ml/4oz unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8081(7)
L1852926-13I	Glass 120ml/4oz unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8082-LVI(7)
L1852926-13J	Glass 120ml/4oz unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8082-LVI(7)
L1852926-13K	Amber 250ml unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1852926-13L	Amber 250ml unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1852926-13M	Amber 1000ml unpreserved	B	7	7	4.8	Y	Absent		HERB-APA(7)
L1852926-13N	Amber 1000ml unpreserved	B	7	7	4.8	Y	Absent		HERB-APA(7)
L1852926-14A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-14B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-14C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-14D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-14E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-14F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-14G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)

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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 2	Date Rec'd in Lab 12/22/18	ALPHA Job # L1852926										
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #									
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		(Use Project name as Project #) <input type="checkbox"/> Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input checked="" type="checkbox"/> Other RLTA <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:									
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.						ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)		Total Bottles					
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides		Herbicides	TAL Metals	Hex Chromium	total grade	Sample Specific Comments
52926-01	RB05-0-2	12/21/18	9:35 am	Soil	JL	X	X	X	X	X	X	X	X		
-02	RB05-8-10		9:40 am		JL	X	X	X	X	X	X	X	X		
-03	RB05-13-15		9:50 am		JL	X	X	X	X	X	X	X	X		
-04	RB05-19-21		10:00 am		JL	X	X	X	X	X	X	X	X		
-05	RB06-0-2		12:30 pm		JL	X	X	X	X	X	X	X	X		
-06	RB06-8-10		12:40 pm		JL	X	X	X	X	X	X	X	X		
-07	RB06-10-12		12:50 pm		JL	X	X	X	X	X	X	X	X		
-08	RB04-0-2		13:20		JL	X	X	X	X	X	X	X	X		
-09	RB04-8-10		13:40		JL	X	X	X	X	X	X	X	X		
-10	RB04-13-15		13:50		JL	X	X	X	X	X	X	X	X		
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative						Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
		Relinquished By: JL		Date/Time: 12/21/18-15:35		Received By: Paula Manella		Date/Time: 12/21/18 15:35							
		Relinquished By: Paula Manella		Date/Time: 12/22/18 00:35		Received By: Wendy Storey		Date/Time: 12/22/18 01:35							

 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #											
		2 of 2	12/22/18	L1852926											
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information		Deliverables	Billing Information										
Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001		<input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input checked="" type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		<input checked="" type="checkbox"/> Same as Client Info PO #											
Client Information		Regulatory Requirement		Disposal Site Information											
Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		(Use Project name as Project #) <input type="checkbox"/> Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:											
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.		ANALYSIS		Sample Filtration											
				<input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)											
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	total cyanide	Sample Specific Comments	Total Bottles
		Date	Time												
52726-01	SODUP01_122118	12/21/18	-	Soil	JD	X	X	X	X	X	X	X	X		
-12	S0TB01_122118			TB	JD	X									
-13	S0FB01_122118		14:45	FB	JD	X	X	X	X	X	X	X	X		
-14	RB04_18-20		14:00	Soil	JD	X	X	X	X	X	X	X	X		
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative								Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
		Relinquished By:		Date/Time		Received By:		Date/Time							
		[Signature]		12/21/18 - 15:35		[Signature]		12/21/18 15:35							
		[Signature]		12/21/18 17:50		[Signature]		12/21/18 17:50							
		[Signature]		12/22/18 00:35		[Signature]		12/22/18 00:35							



ANALYTICAL REPORT

Lab Number:	L1853110
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE + E. 146TH ST.
Project Number:	170487001
Report Date:	01/04/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1853110-01	RB03_17-18	SOIL	BRONX, NY	12/26/18 10:00	12/26/18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Pesticides

L1853110-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1853110-01: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L1853110-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1193398-2/-3 LCS/LCSD recoveries (65%/65%), associated with L1853110-01, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Hexavalent Chromium

The WG1193256-4 Insoluble MS recovery (0%), performed on L1853110-01, is below the acceptance criteria. The Soluble MS recovery (0%) was also below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 86%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Amita Naik

Title: Technical Director/Representative

Date: 01/04/19

ORGANICS

VOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 10:06
 Analyst: MV
 Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	310	140	1
1,1-Dichloroethane	ND		ug/kg	62	9.0	1
Chloroform	ND		ug/kg	93	8.6	1
Carbon tetrachloride	ND		ug/kg	62	14.	1
1,2-Dichloropropane	ND		ug/kg	62	7.7	1
Dibromochloromethane	ND		ug/kg	62	8.6	1
1,1,2-Trichloroethane	ND		ug/kg	62	16.	1
Tetrachloroethene	ND		ug/kg	31	12.	1
Chlorobenzene	ND		ug/kg	31	7.8	1
Trichlorofluoromethane	ND		ug/kg	250	43.	1
1,2-Dichloroethane	ND		ug/kg	62	16.	1
1,1,1-Trichloroethane	ND		ug/kg	31	10.	1
Bromodichloromethane	ND		ug/kg	31	6.7	1
trans-1,3-Dichloropropene	ND		ug/kg	62	17.	1
cis-1,3-Dichloropropene	ND		ug/kg	31	9.8	1
1,3-Dichloropropene, Total	ND		ug/kg	31	9.8	1
1,1-Dichloropropene	ND		ug/kg	31	9.8	1
Bromoform	ND		ug/kg	250	15.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	31	10.	1
Benzene	180		ug/kg	31	10.	1
Toluene	ND		ug/kg	62	34.	1
Ethylbenzene	97		ug/kg	62	8.7	1
Chloromethane	ND		ug/kg	250	58.	1
Bromomethane	ND		ug/kg	120	36.	1
Vinyl chloride	ND		ug/kg	62	21.	1
Chloroethane	ND		ug/kg	120	28.	1
1,1-Dichloroethene	ND		ug/kg	62	15.	1
trans-1,2-Dichloroethene	ND		ug/kg	93	8.5	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853110-01

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	31	8.5	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.9	1
1,3-Dichlorobenzene	ND		ug/kg	120	9.1	1
1,4-Dichlorobenzene	ND		ug/kg	120	10.	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	200		ug/kg	120	34.	1
o-Xylene	42	J	ug/kg	62	18.	1
Xylenes, Total	240	J	ug/kg	62	18.	1
cis-1,2-Dichloroethene	ND		ug/kg	62	11.	1
1,2-Dichloroethene, Total	ND		ug/kg	62	8.5	1
Dibromomethane	ND		ug/kg	120	15.	1
Styrene	ND		ug/kg	62	12.	1
Dichlorodifluoromethane	ND		ug/kg	620	56.	1
Acetone	ND		ug/kg	620	300	1
Carbon disulfide	ND		ug/kg	620	280	1
2-Butanone	ND		ug/kg	620	140	1
Vinyl acetate	ND		ug/kg	620	130	1
4-Methyl-2-pentanone	ND		ug/kg	620	79.	1
1,2,3-Trichloropropane	ND		ug/kg	120	7.8	1
2-Hexanone	ND		ug/kg	620	73.	1
Bromochloromethane	ND		ug/kg	120	13.	1
2,2-Dichloropropane	ND		ug/kg	120	12.	1
1,2-Dibromoethane	ND		ug/kg	62	17.	1
1,3-Dichloropropane	ND		ug/kg	120	10.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	31	8.2	1
Bromobenzene	ND		ug/kg	120	9.0	1
n-Butylbenzene	38	J	ug/kg	62	10.	1
sec-Butylbenzene	51	J	ug/kg	62	9.0	1
tert-Butylbenzene	ND		ug/kg	120	7.3	1
o-Chlorotoluene	ND		ug/kg	120	12.	1
p-Chlorotoluene	ND		ug/kg	120	6.7	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	180	62.	1
Hexachlorobutadiene	ND		ug/kg	250	10.	1
Isopropylbenzene	290		ug/kg	62	6.7	1
p-Isopropyltoluene	30	J	ug/kg	62	6.7	1
Naphthalene	1300		ug/kg	250	40.	1
Acrylonitrile	ND		ug/kg	250	71.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	390		ug/kg	62	10.	1
1,2,3-Trichlorobenzene	ND		ug/kg	120	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	17.	1
1,3,5-Trimethylbenzene	24	J	ug/kg	120	12.	1
1,2,4-Trimethylbenzene	710		ug/kg	120	21.	1
1,4-Dioxane	ND		ug/kg	6200	2200	1
p-Diethylbenzene	50	J	ug/kg	120	11.	1
p-Ethyltoluene	180		ug/kg	120	24.	1
1,2,4,5-Tetramethylbenzene	120		ug/kg	120	12.	1
Ethyl ether	ND		ug/kg	120	21.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	310	88.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	105		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/04/19 07:56
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1194817-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/04/19 07:56
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1194817-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/04/19 07:56
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1194817-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1194817-3 WG1194817-4								
Methylene chloride	86		84		70-130	2		30
1,1-Dichloroethane	87		86		70-130	1		30
Chloroform	95		95		70-130	0		30
Carbon tetrachloride	100		100		70-130	0		30
1,2-Dichloropropane	87		88		70-130	1		30
Dibromochloromethane	93		94		70-130	1		30
1,1,2-Trichloroethane	91		92		70-130	1		30
Tetrachloroethene	97		94		70-130	3		30
Chlorobenzene	93		92		70-130	1		30
Trichlorofluoromethane	74		75		70-139	1		30
1,2-Dichloroethane	87		89		70-130	2		30
1,1,1-Trichloroethane	102		101		70-130	1		30
Bromodichloromethane	101		102		70-130	1		30
trans-1,3-Dichloropropene	98		97		70-130	1		30
cis-1,3-Dichloropropene	104		105		70-130	1		30
1,1-Dichloropropene	102		100		70-130	2		30
Bromoform	91		92		70-130	1		30
1,1,2,2-Tetrachloroethane	94		95		70-130	1		30
Benzene	96		95		70-130	1		30
Toluene	93		91		70-130	2		30
Ethylbenzene	95		94		70-130	1		30
Chloromethane	71		68		52-130	4		30
Bromomethane	57		56	Q	57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1194817-3 WG1194817-4								
Vinyl chloride	70		70		67-130	0		30
Chloroethane	56		55		50-151	2		30
1,1-Dichloroethene	99		97		65-135	2		30
trans-1,2-Dichloroethene	98		96		70-130	2		30
Trichloroethene	98		98		70-130	0		30
1,2-Dichlorobenzene	90		89		70-130	1		30
1,3-Dichlorobenzene	91		90		70-130	1		30
1,4-Dichlorobenzene	90		89		70-130	1		30
Methyl tert butyl ether	101		103		66-130	2		30
p/m-Xylene	94		93		70-130	1		30
o-Xylene	97		95		70-130	2		30
cis-1,2-Dichloroethene	98		98		70-130	0		30
Dibromomethane	98		100		70-130	2		30
Styrene	87		87		70-130	0		30
Dichlorodifluoromethane	91		88		30-146	3		30
Acetone	109		101		54-140	8		30
Carbon disulfide	91		89		59-130	2		30
2-Butanone	80		93		70-130	15		30
Vinyl acetate	88		92		70-130	4		30
4-Methyl-2-pentanone	86		88		70-130	2		30
1,2,3-Trichloropropane	88		91		68-130	3		30
2-Hexanone	94		94		70-130	0		30
Bromochloromethane	98		99		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1194817-3 WG1194817-4								
2,2-Dichloropropane	103		102		70-130	1		30
1,2-Dibromoethane	96		97		70-130	1		30
1,3-Dichloropropane	94		94		69-130	0		30
1,1,1,2-Tetrachloroethane	96		96		70-130	0		30
Bromobenzene	93		92		70-130	1		30
n-Butylbenzene	94		92		70-130	2		30
sec-Butylbenzene	96		93		70-130	3		30
tert-Butylbenzene	96		94		70-130	2		30
o-Chlorotoluene	94		94		70-130	0		30
p-Chlorotoluene	96		96		70-130	0		30
1,2-Dibromo-3-chloropropane	95		98		68-130	3		30
Hexachlorobutadiene	92		89		67-130	3		30
Isopropylbenzene	97		95		70-130	2		30
p-Isopropyltoluene	96		94		70-130	2		30
Naphthalene	94		95		70-130	1		30
Acrylonitrile	75		78		70-130	4		30
n-Propylbenzene	94		92		70-130	2		30
1,2,3-Trichlorobenzene	92		92		70-130	0		30
1,2,4-Trichlorobenzene	93		92		70-130	1		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	97		95		70-130	2		30
1,4-Dioxane	90		94		65-136	4		30
p-Diethylbenzene	95		93		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853110

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1194817-3 WG1194817-4								
p-Ethyltoluene	100		98		70-130	2		30
1,2,4,5-Tetramethylbenzene	96		95		70-130	1		30
Ethyl ether	75		76		67-130	1		30
trans-1,4-Dichloro-2-butene	85		87		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		97		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	111		111		70-130
Dibromofluoromethane	102		104		70-130

SEMIVOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01 D
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 19:37
 Analyst: JG
 Percent Solids: 80%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 18:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1900		ug/kg	330	42.	2
1,2,4-Trichlorobenzene	ND		ug/kg	410	47.	2
Hexachlorobenzene	ND		ug/kg	250	46.	2
Bis(2-chloroethyl)ether	ND		ug/kg	370	56.	2
2-Chloronaphthalene	ND		ug/kg	410	41.	2
1,2-Dichlorobenzene	ND		ug/kg	410	74.	2
1,3-Dichlorobenzene	ND		ug/kg	410	70.	2
1,4-Dichlorobenzene	ND		ug/kg	410	72.	2
3,3'-Dichlorobenzidine	ND		ug/kg	410	110	2
2,4-Dinitrotoluene	ND		ug/kg	410	82.	2
2,6-Dinitrotoluene	ND		ug/kg	410	70.	2
Fluoranthene	12000		ug/kg	250	47.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	410	44.	2
4-Bromophenyl phenyl ether	ND		ug/kg	410	62.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	490	70.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	440	41.	2
Hexachlorobutadiene	ND		ug/kg	410	60.	2
Hexachlorocyclopentadiene	ND		ug/kg	1200	370	2
Hexachloroethane	ND		ug/kg	330	66.	2
Isophorone	ND		ug/kg	370	53.	2
Naphthalene	2200		ug/kg	410	50.	2
Nitrobenzene	ND		ug/kg	370	61.	2
NDPA/DPA	ND		ug/kg	330	47.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	410	63.	2
Bis(2-ethylhexyl)phthalate	180	J	ug/kg	410	140	2
Butyl benzyl phthalate	ND		ug/kg	410	100	2
Di-n-butylphthalate	ND		ug/kg	410	78.	2
Di-n-octylphthalate	ND		ug/kg	410	140	2

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01 D

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	410	38.	2
Dimethyl phthalate	ND		ug/kg	410	86.	2
Benzo(a)anthracene	3500		ug/kg	250	46.	2
Benzo(a)pyrene	4700		ug/kg	330	100	2
Benzo(b)fluoranthene	4000		ug/kg	250	69.	2
Benzo(k)fluoranthene	1100		ug/kg	250	66.	2
Chrysene	3200		ug/kg	250	43.	2
Acenaphthylene	1700		ug/kg	330	63.	2
Anthracene	1500		ug/kg	250	80.	2
Benzo(ghi)perylene	4100		ug/kg	330	48.	2
Fluorene	1200		ug/kg	410	40.	2
Phenanthrene	1400		ug/kg	250	50.	2
Dibenzo(a,h)anthracene	310		ug/kg	250	47.	2
Indeno(1,2,3-cd)pyrene	3000		ug/kg	330	57.	2
Pyrene	16000		ug/kg	250	41.	2
Biphenyl	390	J	ug/kg	940	95.	2
4-Chloroaniline	ND		ug/kg	410	75.	2
2-Nitroaniline	ND		ug/kg	410	79.	2
3-Nitroaniline	ND		ug/kg	410	77.	2
4-Nitroaniline	ND		ug/kg	410	170	2
Dibenzofuran	170	J	ug/kg	410	39.	2
2-Methylnaphthalene	200	J	ug/kg	490	50.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	410	43.	2
Acetophenone	ND		ug/kg	410	51.	2
2,4,6-Trichlorophenol	ND		ug/kg	250	78.	2
p-Chloro-m-cresol	ND		ug/kg	410	61.	2
2-Chlorophenol	ND		ug/kg	410	48.	2
2,4-Dichlorophenol	ND		ug/kg	370	66.	2
2,4-Dimethylphenol	ND		ug/kg	410	140	2
2-Nitrophenol	ND		ug/kg	890	150	2
4-Nitrophenol	ND		ug/kg	570	170	2
2,4-Dinitrophenol	ND		ug/kg	2000	190	2
4,6-Dinitro-o-cresol	ND		ug/kg	1100	200	2
Pentachlorophenol	ND		ug/kg	330	90.	2
Phenol	ND		ug/kg	410	62.	2
2-Methylphenol	ND		ug/kg	410	64.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	590	64.	2

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853110-01 D

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	410	78.	2
Benzoic Acid	ND		ug/kg	1300	420	2
Benzyl Alcohol	ND		ug/kg	410	120	2
Carbazole	170	J	ug/kg	410	40.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	74		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/28/18 09:42
 Analyst: JG

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1193175-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/28/18 09:42
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1193175-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 12/28/18 09:42
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1193175-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		25-120
Phenol-d6	91		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	89		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193175-2 WG1193175-3								
Acenaphthene	80		82		31-137	2		50
1,2,4-Trichlorobenzene	82		88		38-107	7		50
Hexachlorobenzene	83		83		40-140	0		50
Bis(2-chloroethyl)ether	78		84		40-140	7		50
2-Chloronaphthalene	90		92		40-140	2		50
1,2-Dichlorobenzene	76		84		40-140	10		50
1,3-Dichlorobenzene	75		83		40-140	10		50
1,4-Dichlorobenzene	75		83		28-104	10		50
3,3'-Dichlorobenzidine	53		50		40-140	6		50
2,4-Dinitrotoluene	93		91		40-132	2		50
2,6-Dinitrotoluene	99		97		40-140	2		50
Fluoranthene	95		93		40-140	2		50
4-Chlorophenyl phenyl ether	83		82		40-140	1		50
4-Bromophenyl phenyl ether	86		84		40-140	2		50
Bis(2-chloroisopropyl)ether	80		83		40-140	4		50
Bis(2-chloroethoxy)methane	86		89		40-117	3		50
Hexachlorobutadiene	80		88		40-140	10		50
Hexachlorocyclopentadiene	81		86		40-140	6		50
Hexachloroethane	75		84		40-140	11		50
Isophorone	88		89		40-140	1		50
Naphthalene	82		86		40-140	5		50
Nitrobenzene	82		86		40-140	5		50
NDPA/DPA	87		85		36-157	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193175-2 WG1193175-3								
n-Nitrosodi-n-propylamine	85		88		32-121	3		50
Bis(2-ethylhexyl)phthalate	97		93		40-140	4		50
Butyl benzyl phthalate	100		97		40-140	3		50
Di-n-butylphthalate	99		96		40-140	3		50
Di-n-octylphthalate	100		94		40-140	6		50
Diethyl phthalate	86		84		40-140	2		50
Dimethyl phthalate	95		93		40-140	2		50
Benzo(a)anthracene	90		88		40-140	2		50
Benzo(a)pyrene	95		93		40-140	2		50
Benzo(b)fluoranthene	91		90		40-140	1		50
Benzo(k)fluoranthene	92		88		40-140	4		50
Chrysene	86		86		40-140	0		50
Acenaphthylene	93		92		40-140	1		50
Anthracene	92		93		40-140	1		50
Benzo(ghi)perylene	91		88		40-140	3		50
Fluorene	82		83		40-140	1		50
Phenanthrene	89		90		40-140	1		50
Dibenzo(a,h)anthracene	92		89		40-140	3		50
Indeno(1,2,3-cd)pyrene	95		91		40-140	4		50
Pyrene	93		91		35-142	2		50
Biphenyl	95		96		54-104	1		50
4-Chloroaniline	58		50		40-140	15		50
2-Nitroaniline	104		102		47-134	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193175-2 WG1193175-3								
3-Nitroaniline	62		62		26-129	0		50
4-Nitroaniline	86		86		41-125	0		50
Dibenzofuran	81		82		40-140	1		50
2-Methylnaphthalene	88		91		40-140	3		50
1,2,4,5-Tetrachlorobenzene	91		93		40-117	2		50
Acetophenone	90		94		14-144	4		50
2,4,6-Trichlorophenol	102		100		30-130	2		50
p-Chloro-m-cresol	100		100		26-103	0		50
2-Chlorophenol	89		94		25-102	5		50
2,4-Dichlorophenol	97		98		30-130	1		50
2,4-Dimethylphenol	96		96		30-130	0		50
2-Nitrophenol	95		98		30-130	3		50
4-Nitrophenol	93		90		11-114	3		50
2,4-Dinitrophenol	76		75		4-130	1		50
4,6-Dinitro-o-cresol	84		83		10-130	1		50
Pentachlorophenol	87		83		17-109	5		50
Phenol	90		93	Q	26-90	3		50
2-Methylphenol	94		96		30-130.	2		50
3-Methylphenol/4-Methylphenol	95		95		30-130	0		50
2,4,5-Trichlorophenol	104		99		30-130	5		50
Benzoic Acid	35		21		10-110	50		50
Benzyl Alcohol	90		94		40-140	4		50
Carbazole	95		94		54-128	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193175-2 WG1193175-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	84		89		25-120
Phenol-d6	90		91		10-120
Nitrobenzene-d5	82		85		23-120
2-Fluorobiphenyl	88		87		30-120
2,4,6-Tribromophenol	86		83		10-136
4-Terphenyl-d14	89		86		18-120

PCBS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 18:21
 Analyst: HT
 Percent Solids: 80%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 18:42
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/29/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/30/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	40.4	3.58	1	A
Aroclor 1221	ND		ug/kg	40.4	4.05	1	A
Aroclor 1232	ND		ug/kg	40.4	8.56	1	A
Aroclor 1242	ND		ug/kg	40.4	5.44	1	A
Aroclor 1248	ND		ug/kg	40.4	6.06	1	A
Aroclor 1254	ND		ug/kg	40.4	4.42	1	A
Aroclor 1260	ND		ug/kg	40.4	7.46	1	A
Aroclor 1262	ND		ug/kg	40.4	5.13	1	A
Aroclor 1268	ND		ug/kg	40.4	4.18	1	A
PCBs, Total	ND		ug/kg	40.4	3.58	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	37		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	48		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 12/30/18 17:01
Analyst: AWS

Extraction Method: EPA 3546
Extraction Date: 12/27/18 06:08
Cleanup Method: EPA 3665A
Cleanup Date: 12/27/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1192973-1						
Aroclor 1016	ND		ug/kg	32.5	2.88	A
Aroclor 1221	ND		ug/kg	32.5	3.25	A
Aroclor 1232	ND		ug/kg	32.5	6.88	A
Aroclor 1242	ND		ug/kg	32.5	4.38	A
Aroclor 1248	ND		ug/kg	32.5	4.87	A
Aroclor 1254	ND		ug/kg	32.5	3.55	A
Aroclor 1260	ND		ug/kg	32.5	6.00	A
Aroclor 1262	ND		ug/kg	32.5	4.12	A
Aroclor 1268	ND		ug/kg	32.5	3.36	A
PCBs, Total	ND		ug/kg	32.5	2.88	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	71		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1192973-2 WG1192973-3									
Aroclor 1016	75		79		40-140	5		50	A
Aroclor 1260	69		71		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		79		30-150	A
Decachlorobiphenyl	71		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		83		30-150	B
Decachlorobiphenyl	75		76		30-150	B

PESTICIDES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 21:47
 Analyst: DGM
 Percent Solids: 80%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	204	12.8	1	A
2,4,5-T	ND		ug/kg	204	6.31	1	A
2,4,5-TP (Silvex)	ND		ug/kg	204	5.41	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	109		30-150	A
DCAA	112		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01 D
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 10:07
 Analyst: KEG
 Percent Solids: 80%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 18:39
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	37.9	7.42	20	A
Lindane	ND		ug/kg	15.8	7.06	20	A
Alpha-BHC	ND		ug/kg	15.8	4.48	20	A
Beta-BHC	ND		ug/kg	37.9	14.4	20	A
Heptachlor	ND		ug/kg	19.0	8.50	20	A
Aldrin	ND		ug/kg	37.9	13.3	20	A
Heptachlor epoxide	ND		ug/kg	71.1	21.3	20	A
Endrin	ND		ug/kg	15.8	6.48	20	A
Endrin aldehyde	ND		ug/kg	47.4	16.6	20	A
Endrin ketone	ND		ug/kg	37.9	9.76	20	A
Dieldrin	ND		ug/kg	23.7	11.8	20	A
4,4'-DDE	ND		ug/kg	37.9	8.76	20	A
4,4'-DDD	ND		ug/kg	37.9	13.5	20	A
4,4'-DDT	ND		ug/kg	71.1	30.5	20	A
Endosulfan I	ND		ug/kg	37.9	8.96	20	A
Endosulfan II	ND		ug/kg	37.9	12.7	20	A
Endosulfan sulfate	ND		ug/kg	15.8	7.52	20	A
Methoxychlor	ND		ug/kg	71.1	22.1	20	A
Toxaphene	ND		ug/kg	711	199.	20	A
cis-Chlordane	ND		ug/kg	47.4	13.2	20	A
trans-Chlordane	ND		ug/kg	47.4	12.5	20	A
Chlordane	ND		ug/kg	308	126.	20	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853110-01 D

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/28/18 11:37
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 12/27/18 13:10
Cleanup Method: EPA 3620B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1193145-1						
Delta-BHC	ND		ug/kg	1.58	0.310	A
Lindane	ND		ug/kg	0.659	0.295	A
Alpha-BHC	ND		ug/kg	0.659	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.600	A
Heptachlor	ND		ug/kg	0.791	0.355	A
Aldrin	ND		ug/kg	1.58	0.557	A
Heptachlor epoxide	ND		ug/kg	2.97	0.890	A
Endrin	ND		ug/kg	0.659	0.270	A
Endrin aldehyde	ND		ug/kg	1.98	0.692	A
Endrin ketone	ND		ug/kg	1.58	0.407	A
Dieldrin	ND		ug/kg	0.989	0.494	A
4,4'-DDE	ND		ug/kg	1.58	0.366	A
4,4'-DDD	ND		ug/kg	1.58	0.564	A
4,4'-DDT	ND		ug/kg	2.97	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.374	A
Endosulfan II	ND		ug/kg	1.58	0.529	A
Endosulfan sulfate	ND		ug/kg	0.659	0.314	A
Methoxychlor	ND		ug/kg	2.97	0.923	A
Toxaphene	ND		ug/kg	29.7	8.30	A
cis-Chlordane	ND		ug/kg	1.98	0.551	A
trans-Chlordane	ND		ug/kg	1.98	0.522	A
Chlordane	ND		ug/kg	12.8	5.24	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 12/28/18 11:37
 Analyst: JB

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1193145-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	111		30-150	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 12/31/18 06:23
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:06

Methylation Date: 12/28/18 08:43

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01 Batch: WG1193211-1						
2,4-D	ND		ug/kg	164	10.3	A
2,4,5-T	ND		ug/kg	164	5.07	A
2,4,5-TP (Silvex)	ND		ug/kg	164	4.35	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	89		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1193145-2 WG1193145-3									
Delta-BHC	100		108		30-150	8		30	A
Lindane	99		106		30-150	7		30	A
Alpha-BHC	107		106		30-150	1		30	A
Beta-BHC	88		95		30-150	8		30	A
Heptachlor	96		105		30-150	9		30	A
Aldrin	92		102		30-150	10		30	A
Heptachlor epoxide	103		114		30-150	10		30	A
Endrin	106		115		30-150	8		30	A
Endrin aldehyde	86		93		30-150	8		30	A
Endrin ketone	120		121		30-150	1		30	A
Dieldrin	111		121		30-150	9		30	A
4,4'-DDE	92		98		30-150	6		30	A
4,4'-DDD	103		116		30-150	12		30	A
4,4'-DDT	101		117		30-150	15		30	A
Endosulfan I	91		98		30-150	7		30	A
Endosulfan II	103		113		30-150	9		30	A
Endosulfan sulfate	98		97		30-150	1		30	A
Methoxychlor	104		107		30-150	3		30	A
cis-Chlordane	68		73		30-150	7		30	A
trans-Chlordane	76		70		30-150	8		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1193145-2 WG1193145-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	83		87		30-150	B
Decachlorobiphenyl	88		91		30-150	B
2,4,5,6-Tetrachloro-m-xylene	89		92		30-150	A
Decachlorobiphenyl	114		116		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1193211-2 WG1193211-3									
2,4-D	116		131		30-150	12		30	A
2,4,5-T	95		94		30-150	1		30	A
2,4,5-TP (Silvex)	82		82		30-150	0		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	97		100		30-150	A
DCAA	100		106		30-150	B

METALS

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853110-01

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5640		mg/kg	9.47	2.56	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.74	0.360	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Arsenic, Total	2.73		mg/kg	0.947	0.197	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Barium, Total	56.4		mg/kg	0.947	0.165	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Beryllium, Total	0.152	J	mg/kg	0.474	0.031	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Cadmium, Total	0.322	J	mg/kg	0.947	0.093	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Calcium, Total	6470		mg/kg	9.47	3.32	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Chromium, Total	17.1		mg/kg	0.947	0.091	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Cobalt, Total	6.08		mg/kg	1.89	0.157	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Copper, Total	20.5		mg/kg	0.947	0.244	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Iron, Total	11800		mg/kg	4.74	0.855	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Lead, Total	97.1		mg/kg	4.74	0.254	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Magnesium, Total	2770		mg/kg	9.47	1.46	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Manganese, Total	295		mg/kg	0.947	0.151	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Mercury, Total	0.716		mg/kg	0.078	0.017	1	12/28/18 06:00	01/03/19 21:00	EPA 7471B	1,7471B	EA
Nickel, Total	31.0		mg/kg	2.37	0.229	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Potassium, Total	1290		mg/kg	237	13.6	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Selenium, Total	0.606	J	mg/kg	1.89	0.244	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.947	0.268	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Sodium, Total	149	J	mg/kg	189	2.98	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.89	0.298	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Vanadium, Total	16.7		mg/kg	0.947	0.192	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Zinc, Total	64.8		mg/kg	4.74	0.278	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	17		mg/kg	1.0	1.0	1		12/29/18 04:58	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1193349-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	12/28/18 06:00	01/03/19 20:33	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1193639-1										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Antimony, Total	ND	mg/kg	2.00	0.152	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Barium, Total	ND	mg/kg	0.400	0.070	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Calcium, Total	ND	mg/kg	4.00	1.40	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Chromium, Total	ND	mg/kg	0.400	0.038	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Cobalt, Total	ND	mg/kg	0.800	0.066	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Copper, Total	ND	mg/kg	0.400	0.103	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Iron, Total	ND	mg/kg	2.00	0.361	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Lead, Total	ND	mg/kg	2.00	0.107	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Manganese, Total	ND	mg/kg	0.400	0.064	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Nickel, Total	ND	mg/kg	1.00	0.097	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Potassium, Total	ND	mg/kg	100	5.76	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Selenium, Total	ND	mg/kg	0.800	0.103	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Silver, Total	ND	mg/kg	0.400	0.113	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Sodium, Total	1.49	J	mg/kg	80.0	1.26	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC
Thallium, Total	ND	mg/kg	0.800	0.126	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Zinc, Total	ND	mg/kg	2.00	0.117	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193349-2 SRM Lot Number: D102-540								
Mercury, Total	114		-		65-134	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193639-2 SRM Lot Number: D102-540					
Aluminum, Total	67	-	49-150	-	
Antimony, Total	148	-	1-199	-	
Arsenic, Total	90	-	83-117	-	
Barium, Total	86	-	83-118	-	
Beryllium, Total	89	-	83-116	-	
Cadmium, Total	98	-	83-118	-	
Calcium, Total	86	-	82-118	-	
Chromium, Total	85	-	83-117	-	
Cobalt, Total	88	-	84-116	-	
Copper, Total	85	-	84-116	-	
Iron, Total	83	-	61-139	-	
Lead, Total	86	-	82-118	-	
Magnesium, Total	77	-	76-124	-	
Manganese, Total	88	-	82-118	-	
Nickel, Total	89	-	83-117	-	
Potassium, Total	76	-	70-130	-	
Selenium, Total	90	-	79-121	-	
Silver, Total	86	-	80-120	-	
Sodium, Total	94	-	74-126	-	
Thallium, Total	95	-	81-119	-	
Vanadium, Total	84	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193639-2 SRM Lot Number: D102-540					
Zinc, Total	87	-	81-118	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193349-3 WG1193349-4 QC Sample: L1853088-01 Client ID: MS Sample												
Mercury, Total	13.2	0.148	11.7	0	Q	13.3	68	Q	80-120	13		20

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits		
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193639-3 WG1193639-4 QC Sample: L1853234-03 Client ID: MS Sample											
Aluminum, Total	13200	265	14700	566	Q	14000	304	Q	75-125	5	20
Antimony, Total	ND	66.2	50.8	77		49.4	75		75-125	3	20
Arsenic, Total	6.94	15.9	21.7	93		21.2	90		75-125	2	20
Barium, Total	28.4	265	268	90		251	85		75-125	7	20
Beryllium, Total	0.516J	6.62	6.45	97		6.17	94		75-125	4	20
Cadmium, Total	0.503J	6.76	6.30	93		6.09	91		75-125	3	20
Calcium, Total	2740	1320	3520	59	Q	3310	43	Q	75-125	6	20
Chromium, Total	28.8	26.5	52.5	89		50.8	84		75-125	3	20
Cobalt, Total	9.66	66.2	64.3	82		61.6	79		75-125	4	20
Copper, Total	12.5	33.1	39.3	81		35.9	71	Q	75-125	9	20
Iron, Total	26800	132	28800	1510	Q	27900	836	Q	75-125	3	20
Lead, Total	23.5	67.6	69.2	68	Q	66.5	64	Q	75-125	4	20
Magnesium, Total	6200	1320	7600	106		7270	81		75-125	4	20
Manganese, Total	349	66.2	405	84		386	56	Q	75-125	5	20
Nickel, Total	20.2	66.2	75.0	83		71.6	78		75-125	5	20
Potassium, Total	2880	1320	4550	126	Q	4150	96		75-125	9	20
Selenium, Total	1.06J	15.9	14.6	92		13.7	87		75-125	6	20
Silver, Total	ND	39.7	36.3	91		35.1	89		75-125	3	20
Sodium, Total	701	1320	1890	90		1820	85		75-125	4	20
Thallium, Total	ND	15.9	12.0	75		11.8	75		75-125	2	20
Vanadium, Total	36.3	66.2	96.8	91		92.8	86		75-125	4	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193639-3 WG1193639-4 QC Sample: L1853234-03 Client ID: MS Sample									
Zinc, Total	69.5	66.2	122	79	117	72	Q 75-125	4	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.4		%	0.100	NA	1	-	12/28/18 09:25	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/28/18 13:10	01/02/19 11:10	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.995	0.199	1	12/27/18 17:50	12/28/18 18:50	1,7196A	AJ



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1193256-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	12/27/18 17:50	12/28/18 18:50	1,7196A	AJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1193398-1									
Cyanide, Total	ND	mg/kg	0.89	0.19	1	12/28/18 13:10	01/02/19 11:01	1,9010C/9012B	LH

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1193256-2								
Chromium, Hexavalent	100		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1193398-2 WG1193398-3								
Cyanide, Total	65	Q	65	Q	80-120	11		35

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1193256-4 QC Sample: L1853110-01 Client ID: RB03_17-18												
Chromium, Hexavalent	ND	1280	ND	0	Q	-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1193398-4 WG1193398-5 QC Sample: L1853252-01 Client ID: MS Sample												
Cyanide, Total	ND	10	11	100		7.5	69	Q	75-125	38	Q	35

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853110

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1193256-6 QC Sample: L1853110-01 Client ID: RB03_17-18						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1193437-2 QC Sample: L1853249-02 Client ID: DUP Sample						
Solids, Total	89.7	89.6	%	0		20

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Serial_No:01041915:09
Lab Number: L1853110
Report Date: 01/04/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853110-01A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853110-01B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 05:33	NYTCL-8260HLW(14)
L1853110-01C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 05:33	NYTCL-8260HLW(14)
L1853110-01D	Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853110-01E	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1853110-01F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853110-01G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


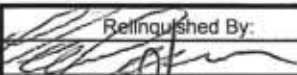
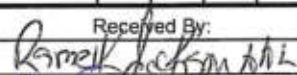
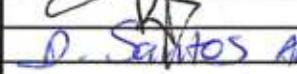

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3268	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab 12/26/18	ALPHA Job # L1853110																																																																																																																																																																																		
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUS (1 File) <input checked="" type="checkbox"/> EQUS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PD #																																																																																																																																																																																	
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: 703 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																																																																																																																	
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.		ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below) Sample Specific Comments																																																																																																																																																																																			
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">Part 375/TCL VOCs</th> <th rowspan="2">Part 375/TCL SVOCs</th> <th rowspan="2">Part 375/TCL PCBs</th> <th rowspan="2">Pesticides</th> <th rowspan="2">Herbicides</th> <th rowspan="2">TAL Metals</th> <th rowspan="2">Hex Chromium</th> <th rowspan="2">Total cyanide</th> <th rowspan="2">Total Bottles</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>53110 -01</td> <td>RB03-17-18</td> <td>12/26/18</td> <td>10:00</td> <td>S</td> <td>VZ</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>HOLD ANALYSES</td> <td>7</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total cyanide	Total Bottles	Date	Time	53110 -01	RB03-17-18	12/26/18	10:00	S	VZ	X	X	X	X	X	X	X	X	HOLD ANALYSES	7																																																																																																																																																	Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type: V A A A A A A A Preservative: F A A A A A A A		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)
ALPHA Lab ID (Lab Use Only)	Sample ID			Collection													Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total cyanide	Total Bottles																																																																																																																																																												
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Relinquished By:  Date/Time: 12/26/18 1522 Received By:  Date/Time: 12/26/18 1900  Date/Time: 12/26/18 2230  Date/Time: 12/26/18 2230																																																																																																																																																																																			



ANALYTICAL REPORT

Lab Number:	L1853111
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE + E. 146TH ST.
Project Number:	170487001
Report Date:	01/04/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1853111-01	RB03_0-2	SOIL	BRONX, NY	12/26/18 09:45	12/26/18
L1853111-02	RB03_2-3	SOIL	BRONX, NY	12/26/18 09:50	12/26/18
L1853111-03	RB03_10-12	SOIL	BRONX, NY	12/26/18 09:55	12/26/18
L1853111-04	RB12_0-2	SOIL	BRONX, NY	12/26/18 11:55	12/26/18
L1853111-05	RB12_8-9	SOIL	BRONX, NY	12/26/18 12:00	12/26/18
L1853111-06	RB12_9-10	SOIL	BRONX, NY	12/26/18 12:05	12/26/18
L1853111-07	RB12_10-12	SOIL	BRONX, NY	12/26/18 12:10	12/26/18
L1853111-08	RB02_0-2	SOIL	BRONX, NY	12/26/18 13:25	12/26/18
L1853111-09	RB02_7-9	SOIL	BRONX, NY	12/26/18 13:30	12/26/18
L1853111-10	RB02_10-12	SOIL	BRONX, NY	12/26/18 13:35	12/26/18
L1853111-11	RB02_13-15	SOIL	BRONX, NY	12/26/18 13:40	12/26/18
L1853111-12	SOTB02_122618	WATER	BRONX, NY	12/26/18 00:00	12/26/18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Volatile Organics

L1853111-01: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (158%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L1853111-02: The internal standard (IS) response(s) for 1,4-dichlorobenzene-d4 (44%) and the surrogate recovery for 4-bromofluorobenzene (133%) were outside the acceptance criteria; however, re-analysis achieved similar results: 1,4-dichlorobenzene-d4 (47%) and 4-bromofluorobenzene (141%). The results of both analyses are reported; however, since the IS response was below method criteria, all associated compounds and surrogate recoveries are considered to have a potentially high.

L1853111-04: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.

L1853111-05: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1853111-05: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (146%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Semivolatile Organics

L1853111-01, -02, -03, -04, -05, -08, -09 and -10: The sample has elevated detection limits due to the dilution required by the sample matrix.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Case Narrative (continued)

Pesticides

L1853111-02, -03, -05 and -09: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1853111-03 and -05: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

L1853111-07: The surrogate recovery is outside the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (322%); however, the sample was not re-extracted due to coelution with obvious interferences.

Herbicides

L1853111-09: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1853111-09: The surrogate recoveries are below the acceptance criteria for dcaa (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L1853111-01 through -11: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1193065-2 LCS recovery (66%), associated with L1853111-01 through -06, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1193067-2 LCS recovery (65%), associated with L1853111-07 through -11, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Project Name: GERARD AVE + E. 146TH ST.
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Lab Number: L1853111
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Case Narrative (continued)

Hexavalent Chromium

The WG1193257-5 Soluble MS recovery (61%), performed on L1853111-10, was outside the acceptance criteria. This has been attributed to matrix interference. A post-spike was performed with a recovery of 95%.

The WG1193259-4 Insoluble MS recovery (59%), performed on L1853111-11, is below the acceptance criteria. The Soluble MS recovery (0%) was also below criteria. This has been attributed to matrix interference.

A post-spike was performed with an acceptable recovery of 94%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Amita Naik

Title: Technical Director/Representative

Date: 01/04/19

ORGANICS

VOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 01:32
 Analyst: MV
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	280	130	1
1,1-Dichloroethane	ND		ug/kg	55	8.0	1
Chloroform	ND		ug/kg	83	7.7	1
Carbon tetrachloride	ND		ug/kg	55	13.	1
1,2-Dichloropropane	ND		ug/kg	55	6.9	1
Dibromochloromethane	ND		ug/kg	55	7.7	1
1,1,2-Trichloroethane	ND		ug/kg	55	15.	1
Tetrachloroethene	740		ug/kg	28	11.	1
Chlorobenzene	ND		ug/kg	28	7.0	1
Trichlorofluoromethane	ND		ug/kg	220	38.	1
1,2-Dichloroethane	ND		ug/kg	55	14.	1
1,1,1-Trichloroethane	ND		ug/kg	28	9.2	1
Bromodichloromethane	ND		ug/kg	28	6.0	1
trans-1,3-Dichloropropene	ND		ug/kg	55	15.	1
cis-1,3-Dichloropropene	ND		ug/kg	28	8.7	1
1,3-Dichloropropene, Total	ND		ug/kg	28	8.7	1
1,1-Dichloropropene	ND		ug/kg	28	8.8	1
Bromoform	ND		ug/kg	220	14.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	28	9.2	1
Benzene	18	J	ug/kg	28	9.2	1
Toluene	ND		ug/kg	55	30.	1
Ethylbenzene	44	J	ug/kg	55	7.8	1
Chloromethane	ND		ug/kg	220	51.	1
Bromomethane	ND		ug/kg	110	32.	1
Vinyl chloride	ND		ug/kg	55	18.	1
Chloroethane	ND		ug/kg	110	25.	1
1,1-Dichloroethene	ND		ug/kg	55	13.	1
trans-1,2-Dichloroethene	ND		ug/kg	83	7.6	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-01

Date Collected: 12/26/18 09:45

Client ID: RB03_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	28	7.6	1
1,2-Dichlorobenzene	ND		ug/kg	110	7.9	1
1,3-Dichlorobenzene	ND		ug/kg	110	8.2	1
1,4-Dichlorobenzene	ND		ug/kg	110	9.4	1
Methyl tert butyl ether	ND		ug/kg	110	11.	1
p/m-Xylene	120		ug/kg	110	31.	1
o-Xylene	74		ug/kg	55	16.	1
Xylenes, Total	190		ug/kg	55	16.	1
cis-1,2-Dichloroethene	ND		ug/kg	55	9.6	1
1,2-Dichloroethene, Total	ND		ug/kg	55	7.6	1
Dibromomethane	ND		ug/kg	110	13.	1
Styrene	ND		ug/kg	55	11.	1
Dichlorodifluoromethane	ND		ug/kg	550	50.	1
Acetone	ND		ug/kg	550	260	1
Carbon disulfide	ND		ug/kg	550	250	1
2-Butanone	ND		ug/kg	550	120	1
Vinyl acetate	ND		ug/kg	550	120	1
4-Methyl-2-pentanone	ND		ug/kg	550	71.	1
1,2,3-Trichloropropane	ND		ug/kg	110	7.0	1
2-Hexanone	ND		ug/kg	550	65.	1
Bromochloromethane	ND		ug/kg	110	11.	1
2,2-Dichloropropane	ND		ug/kg	110	11.	1
1,2-Dibromoethane	ND		ug/kg	55	15.	1
1,3-Dichloropropane	ND		ug/kg	110	9.2	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	28	7.3	1
Bromobenzene	ND		ug/kg	110	8.0	1
n-Butylbenzene	49	J	ug/kg	55	9.2	1
sec-Butylbenzene	78		ug/kg	55	8.0	1
tert-Butylbenzene	13	J	ug/kg	110	6.5	1
o-Chlorotoluene	ND		ug/kg	110	10.	1
p-Chlorotoluene	ND		ug/kg	110	6.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	160	55.	1
Hexachlorobutadiene	ND		ug/kg	220	9.3	1
Isopropylbenzene	39	J	ug/kg	55	6.0	1
p-Isopropyltoluene	130		ug/kg	55	6.0	1
Naphthalene	140	J	ug/kg	220	36.	1
Acrylonitrile	ND		ug/kg	220	63.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	39	J	ug/kg	55	9.4	1
1,2,3-Trichlorobenzene	ND		ug/kg	110	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	110	15.	1
1,3,5-Trimethylbenzene	330		ug/kg	110	11.	1
1,2,4-Trimethylbenzene	540		ug/kg	110	18.	1
1,4-Dioxane	ND		ug/kg	5500	1900	1
p-Diethylbenzene	770		ug/kg	110	9.8	1
p-Ethyltoluene	270		ug/kg	110	21.	1
1,2,4,5-Tetramethylbenzene	150		ug/kg	110	10.	1
Ethyl ether	ND		ug/kg	110	19.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	280	78.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	158	Q	70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 20:29
 Analyst: MV
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.9	3.2	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	0.20	J	ug/kg	2.1	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.32	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.37	1
Tetrachloroethene	26		ug/kg	0.69	0.27	1
Chlorobenzene	ND		ug/kg	0.69	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.96	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.69	0.23	1
Bromodichloromethane	ND		ug/kg	0.69	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.38	1
cis-1,3-Dichloropropene	ND		ug/kg	0.69	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.69	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.69	0.22	1
Bromoform	ND		ug/kg	5.5	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.69	0.23	1
Benzene	0.63	J	ug/kg	0.69	0.23	1
Toluene	2.4		ug/kg	1.4	0.75	1
Ethylbenzene	0.93	J	ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.5	1.3	1
Bromomethane	ND		ug/kg	2.8	0.80	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.8	0.62	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.19	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-02

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.69	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.28	1
p/m-Xylene	2.0	J	ug/kg	2.8	0.77	1
o-Xylene	0.60	J	ug/kg	1.4	0.40	1
Xylenes, Total	2.6	J	ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.8	0.33	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	ND		ug/kg	14	6.6	1
Carbon disulfide	ND		ug/kg	14	6.3	1
2-Butanone	ND		ug/kg	14	3.0	1
Vinyl acetate	ND		ug/kg	14	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	0.17	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.8	0.28	1
2,2-Dichloropropane	ND		ug/kg	2.8	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
1,3-Dichloropropane	ND		ug/kg	2.8	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.69	0.18	1
Bromobenzene	ND		ug/kg	2.8	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.8	0.16	1
o-Chlorotoluene	ND		ug/kg	2.8	0.26	1
p-Chlorotoluene	ND		ug/kg	2.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.5	0.23	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.5	0.89	1
Acrylonitrile	ND		ug/kg	5.5	1.6	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
Client ID: RB03_2-3
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.40	J	ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.37	1
1,3,5-Trimethylbenzene	0.79	J	ug/kg	2.8	0.26	1
1,2,4-Trimethylbenzene	1.2	J	ug/kg	2.8	0.46	1
1,4-Dioxane	ND		ug/kg	140	48.	1
p-Diethylbenzene	ND		ug/kg	2.8	0.24	1
p-Ethyltoluene	1.7	J	ug/kg	2.8	0.53	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.8	0.26	1
Ethyl ether	ND		ug/kg	2.8	0.47	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.9	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	118		70-130
4-Bromofluorobenzene	133	Q	70-130
Dibromofluoromethane	106		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02 R
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 03:51
 Analyst: MV
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.3	3.3	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.21	1
Chloroform	0.37	J	ug/kg	2.2	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.34	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.39	1
Tetrachloroethene	31		ug/kg	0.73	0.29	1
Chlorobenzene	ND		ug/kg	0.73	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.8	1.0	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.38	1
1,1,1-Trichloroethane	ND		ug/kg	0.73	0.24	1
Bromodichloromethane	ND		ug/kg	0.73	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.40	1
cis-1,3-Dichloropropene	ND		ug/kg	0.73	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.73	0.23	1
1,1-Dichloropropene	ND		ug/kg	0.73	0.23	1
Bromoform	ND		ug/kg	5.8	0.36	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.73	0.24	1
Benzene	0.54	J	ug/kg	0.73	0.24	1
Toluene	2.0		ug/kg	1.4	0.79	1
Ethylbenzene	0.62	J	ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.8	1.4	1
Bromomethane	ND		ug/kg	2.9	0.85	1
Vinyl chloride	ND		ug/kg	1.4	0.49	1
Chloroethane	ND		ug/kg	2.9	0.66	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-02 R

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.73	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	2.9	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	2.9	0.25	1
Methyl tert butyl ether	ND		ug/kg	2.9	0.29	1
p/m-Xylene	1.3	J	ug/kg	2.9	0.82	1
o-Xylene	0.44	J	ug/kg	1.4	0.42	1
Xylenes, Total	1.7	J	ug/kg	1.4	0.42	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.26	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.20	1
Dibromomethane	ND		ug/kg	2.9	0.35	1
Styrene	ND		ug/kg	1.4	0.29	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	7.7	J	ug/kg	14	7.0	1
Carbon disulfide	ND		ug/kg	14	6.6	1
2-Butanone	ND		ug/kg	14	3.2	1
Vinyl acetate	ND		ug/kg	14	3.1	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.9	1
1,2,3-Trichloropropane	ND		ug/kg	2.9	0.18	1
2-Hexanone	ND		ug/kg	14	1.7	1
Bromochloromethane	ND		ug/kg	2.9	0.30	1
2,2-Dichloropropane	ND		ug/kg	2.9	0.29	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.41	1
1,3-Dichloropropane	ND		ug/kg	2.9	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.73	0.19	1
Bromobenzene	ND		ug/kg	2.9	0.21	1
n-Butylbenzene	ND		ug/kg	1.4	0.24	1
sec-Butylbenzene	ND		ug/kg	1.4	0.21	1
tert-Butylbenzene	ND		ug/kg	2.9	0.17	1
o-Chlorotoluene	ND		ug/kg	2.9	0.28	1
p-Chlorotoluene	ND		ug/kg	2.9	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.8	0.25	1
Isopropylbenzene	ND		ug/kg	1.4	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.16	1
Naphthalene	ND		ug/kg	5.8	0.95	1
Acrylonitrile	ND		ug/kg	5.8	1.7	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02 R
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.25	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.9	0.47	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.9	0.40	1
1,3,5-Trimethylbenzene	0.46	J	ug/kg	2.9	0.28	1
1,2,4-Trimethylbenzene	0.84	J	ug/kg	2.9	0.49	1
1,4-Dioxane	ND		ug/kg	140	51.	1
p-Diethylbenzene	ND		ug/kg	2.9	0.26	1
p-Ethyltoluene	1.0	J	ug/kg	2.9	0.56	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.9	0.28	1
Ethyl ether	ND		ug/kg	2.9	0.50	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.3	2.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	141	Q	70-130
Dibromofluoromethane	105		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 01:58
 Analyst: MV
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	320	150	1
1,1-Dichloroethane	ND		ug/kg	65	9.4	1
Chloroform	ND		ug/kg	98	9.1	1
Carbon tetrachloride	ND		ug/kg	65	15.	1
1,2-Dichloropropane	ND		ug/kg	65	8.1	1
Dibromochloromethane	ND		ug/kg	65	9.1	1
1,1,2-Trichloroethane	ND		ug/kg	65	17.	1
Tetrachloroethene	25	J	ug/kg	32	13.	1
Chlorobenzene	ND		ug/kg	32	8.3	1
Trichlorofluoromethane	ND		ug/kg	260	45.	1
1,2-Dichloroethane	ND		ug/kg	65	17.	1
1,1,1-Trichloroethane	ND		ug/kg	32	11.	1
Bromodichloromethane	ND		ug/kg	32	7.1	1
trans-1,3-Dichloropropene	ND		ug/kg	65	18.	1
cis-1,3-Dichloropropene	ND		ug/kg	32	10.	1
1,3-Dichloropropene, Total	ND		ug/kg	32	10.	1
1,1-Dichloropropene	ND		ug/kg	32	10.	1
Bromoform	ND		ug/kg	260	16.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	32	11.	1
Benzene	13	J	ug/kg	32	11.	1
Toluene	ND		ug/kg	65	35.	1
Ethylbenzene	32	J	ug/kg	65	9.2	1
Chloromethane	ND		ug/kg	260	61.	1
Bromomethane	ND		ug/kg	130	38.	1
Vinyl chloride	ND		ug/kg	65	22.	1
Chloroethane	ND		ug/kg	130	29.	1
1,1-Dichloroethene	ND		ug/kg	65	16.	1
trans-1,2-Dichloroethene	ND		ug/kg	98	8.9	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-03

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	32	8.9	1
1,2-Dichlorobenzene	ND		ug/kg	130	9.4	1
1,3-Dichlorobenzene	ND		ug/kg	130	9.6	1
1,4-Dichlorobenzene	ND		ug/kg	130	11.	1
Methyl tert butyl ether	ND		ug/kg	130	13.	1
p/m-Xylene	ND		ug/kg	130	36.	1
o-Xylene	33	J	ug/kg	65	19.	1
Xylenes, Total	33	J	ug/kg	65	19.	1
cis-1,2-Dichloroethene	ND		ug/kg	65	11.	1
1,2-Dichloroethene, Total	ND		ug/kg	65	8.9	1
Dibromomethane	ND		ug/kg	130	16.	1
Styrene	55	J	ug/kg	65	13.	1
Dichlorodifluoromethane	ND		ug/kg	650	60.	1
Acetone	ND		ug/kg	650	310	1
Carbon disulfide	ND		ug/kg	650	300	1
2-Butanone	ND		ug/kg	650	140	1
Vinyl acetate	ND		ug/kg	650	140	1
4-Methyl-2-pentanone	ND		ug/kg	650	83.	1
1,2,3-Trichloropropane	ND		ug/kg	130	8.3	1
2-Hexanone	ND		ug/kg	650	77.	1
Bromochloromethane	ND		ug/kg	130	13.	1
2,2-Dichloropropane	ND		ug/kg	130	13.	1
1,2-Dibromoethane	ND		ug/kg	65	18.	1
1,3-Dichloropropane	ND		ug/kg	130	11.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	32	8.6	1
Bromobenzene	ND		ug/kg	130	9.4	1
n-Butylbenzene	79		ug/kg	65	11.	1
sec-Butylbenzene	63	J	ug/kg	65	9.5	1
tert-Butylbenzene	ND		ug/kg	130	7.7	1
o-Chlorotoluene	ND		ug/kg	130	12.	1
p-Chlorotoluene	ND		ug/kg	130	7.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	200	65.	1
Hexachlorobutadiene	ND		ug/kg	260	11.	1
Isopropylbenzene	42	J	ug/kg	65	7.1	1
p-Isopropyltoluene	36	J	ug/kg	65	7.1	1
Naphthalene	630		ug/kg	260	42.	1
Acrylonitrile	ND		ug/kg	260	75.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03
Client ID: RB03_10-12
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	79		ug/kg	65	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	130	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	130	18.	1
1,3,5-Trimethylbenzene	75	J	ug/kg	130	12.	1
1,2,4-Trimethylbenzene	250		ug/kg	130	22.	1
1,4-Dioxane	ND		ug/kg	6500	2300	1
p-Diethylbenzene	200		ug/kg	130	12.	1
p-Ethyltoluene	97	J	ug/kg	130	25.	1
1,2,4,5-Tetramethylbenzene	270		ug/kg	130	12.	1
Ethyl ether	ND		ug/kg	130	22.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	320	92.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 02:25
 Analyst: MV
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	380	180	1
1,1-Dichloroethane	ND		ug/kg	77	11.	1
Chloroform	ND		ug/kg	120	11.	1
Carbon tetrachloride	ND		ug/kg	77	18.	1
1,2-Dichloropropane	ND		ug/kg	77	9.6	1
Dibromochloromethane	ND		ug/kg	77	11.	1
1,1,2-Trichloroethane	ND		ug/kg	77	20.	1
Tetrachloroethene	130		ug/kg	38	15.	1
Chlorobenzene	ND		ug/kg	38	9.8	1
Trichlorofluoromethane	ND		ug/kg	310	53.	1
1,2-Dichloroethane	ND		ug/kg	77	20.	1
1,1,1-Trichloroethane	ND		ug/kg	38	13.	1
Bromodichloromethane	ND		ug/kg	38	8.4	1
trans-1,3-Dichloropropene	ND		ug/kg	77	21.	1
cis-1,3-Dichloropropene	ND		ug/kg	38	12.	1
1,3-Dichloropropene, Total	ND		ug/kg	38	12.	1
1,1-Dichloropropene	ND		ug/kg	38	12.	1
Bromoform	ND		ug/kg	310	19.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	38	13.	1
Benzene	48		ug/kg	38	13.	1
Toluene	400		ug/kg	77	42.	1
Ethylbenzene	120		ug/kg	77	11.	1
Chloromethane	ND		ug/kg	310	72.	1
Bromomethane	ND		ug/kg	150	45.	1
Vinyl chloride	ND		ug/kg	77	26.	1
Chloroethane	ND		ug/kg	150	35.	1
1,1-Dichloroethene	ND		ug/kg	77	18.	1
trans-1,2-Dichloroethene	ND		ug/kg	120	10.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-04

Date Collected: 12/26/18 11:55

Client ID: RB12_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	38	10.	1
1,2-Dichlorobenzene	ND		ug/kg	150	11.	1
1,3-Dichlorobenzene	ND		ug/kg	150	11.	1
1,4-Dichlorobenzene	ND		ug/kg	150	13.	1
Methyl tert butyl ether	ND		ug/kg	150	15.	1
p/m-Xylene	620		ug/kg	150	43.	1
o-Xylene	200		ug/kg	77	22.	1
Xylenes, Total	820		ug/kg	77	22.	1
cis-1,2-Dichloroethene	ND		ug/kg	77	13.	1
1,2-Dichloroethene, Total	ND		ug/kg	77	10.	1
Dibromomethane	ND		ug/kg	150	18.	1
Styrene	ND		ug/kg	77	15.	1
Dichlorodifluoromethane	ND		ug/kg	770	70.	1
Acetone	ND		ug/kg	770	370	1
Carbon disulfide	ND		ug/kg	770	350	1
2-Butanone	ND		ug/kg	770	170	1
Vinyl acetate	ND		ug/kg	770	160	1
4-Methyl-2-pentanone	ND		ug/kg	770	98.	1
1,2,3-Trichloropropane	ND		ug/kg	150	9.8	1
2-Hexanone	ND		ug/kg	770	91.	1
Bromochloromethane	ND		ug/kg	150	16.	1
2,2-Dichloropropane	ND		ug/kg	150	16.	1
1,2-Dibromoethane	ND		ug/kg	77	21.	1
1,3-Dichloropropane	ND		ug/kg	150	13.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	38	10.	1
Bromobenzene	ND		ug/kg	150	11.	1
n-Butylbenzene	19	J	ug/kg	77	13.	1
sec-Butylbenzene	29	J	ug/kg	77	11.	1
tert-Butylbenzene	ND		ug/kg	150	9.1	1
o-Chlorotoluene	ND		ug/kg	150	15.	1
p-Chlorotoluene	ND		ug/kg	150	8.3	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	230	77.	1
Hexachlorobutadiene	ND		ug/kg	310	13.	1
Isopropylbenzene	18	J	ug/kg	77	8.4	1
p-Isopropyltoluene	34	J	ug/kg	77	8.4	1
Naphthalene	220	J	ug/kg	310	50.	1
Acrylonitrile	ND		ug/kg	310	88.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
Client ID: RB12_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	80		ug/kg	77	13.	1
1,2,3-Trichlorobenzene	ND		ug/kg	150	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	150	21.	1
1,3,5-Trimethylbenzene	120	J	ug/kg	150	15.	1
1,2,4-Trimethylbenzene	200		ug/kg	150	26.	1
1,4-Dioxane	ND		ug/kg	7700	2700	1
p-Diethylbenzene	150		ug/kg	150	14.	1
p-Ethyltoluene	340		ug/kg	150	29.	1
1,2,4,5-Tetramethylbenzene	32	J	ug/kg	150	15.	1
Ethyl ether	ND		ug/kg	150	26.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	380	110	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 11:50
 Analyst: JC
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	630	290	2
1,1-Dichloroethane	ND		ug/kg	130	18.	2
Chloroform	ND		ug/kg	190	18.	2
Carbon tetrachloride	ND		ug/kg	130	29.	2
1,2-Dichloropropane	ND		ug/kg	130	16.	2
Dibromochloromethane	ND		ug/kg	130	18.	2
1,1,2-Trichloroethane	ND		ug/kg	130	34.	2
Tetrachloroethene	ND		ug/kg	63	25.	2
Chlorobenzene	ND		ug/kg	63	16.	2
Trichlorofluoromethane	ND		ug/kg	500	88.	2
1,2-Dichloroethane	ND		ug/kg	130	32.	2
1,1,1-Trichloroethane	ND		ug/kg	63	21.	2
Bromodichloromethane	ND		ug/kg	63	14.	2
trans-1,3-Dichloropropene	ND		ug/kg	130	34.	2
cis-1,3-Dichloropropene	ND		ug/kg	63	20.	2
1,3-Dichloropropene, Total	ND		ug/kg	63	20.	2
1,1-Dichloropropene	ND		ug/kg	63	20.	2
Bromoform	ND		ug/kg	500	31.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	63	21.	2
Benzene	ND		ug/kg	63	21.	2
Toluene	ND		ug/kg	130	68.	2
Ethylbenzene	32	J	ug/kg	130	18.	2
Chloromethane	ND		ug/kg	500	120	2
Bromomethane	ND		ug/kg	250	73.	2
Vinyl chloride	ND		ug/kg	130	42.	2
Chloroethane	ND		ug/kg	250	57.	2
1,1-Dichloroethene	ND		ug/kg	130	30.	2
trans-1,2-Dichloroethene	ND		ug/kg	190	17.	2

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-05 D

Date Collected: 12/26/18 12:00

Client ID: RB12_8-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	63	17.	2
1,2-Dichlorobenzene	ND		ug/kg	250	18.	2
1,3-Dichlorobenzene	ND		ug/kg	250	19.	2
1,4-Dichlorobenzene	ND		ug/kg	250	22.	2
Methyl tert butyl ether	ND		ug/kg	250	25.	2
p/m-Xylene	ND		ug/kg	250	71.	2
o-Xylene	ND		ug/kg	130	37.	2
Xylenes, Total	ND		ug/kg	130	37.	2
cis-1,2-Dichloroethene	ND		ug/kg	130	22.	2
1,2-Dichloroethene, Total	ND		ug/kg	130	17.	2
Dibromomethane	ND		ug/kg	250	30.	2
Styrene	ND		ug/kg	130	25.	2
Dichlorodifluoromethane	ND		ug/kg	1300	120	2
Acetone	ND		ug/kg	1300	610	2
Carbon disulfide	ND		ug/kg	1300	570	2
2-Butanone	ND		ug/kg	1300	280	2
Vinyl acetate	ND		ug/kg	1300	270	2
4-Methyl-2-pentanone	ND		ug/kg	1300	160	2
1,2,3-Trichloropropane	ND		ug/kg	250	16.	2
2-Hexanone	ND		ug/kg	1300	150	2
Bromochloromethane	ND		ug/kg	250	26.	2
2,2-Dichloropropane	ND		ug/kg	250	25.	2
1,2-Dibromoethane	ND		ug/kg	130	35.	2
1,3-Dichloropropane	ND		ug/kg	250	21.	2
1,1,1,2-Tetrachloroethane	ND		ug/kg	63	17.	2
Bromobenzene	ND		ug/kg	250	18.	2
n-Butylbenzene	2000		ug/kg	130	21.	2
sec-Butylbenzene	1600		ug/kg	130	18.	2
tert-Butylbenzene	90	J	ug/kg	250	15.	2
o-Chlorotoluene	ND		ug/kg	250	24.	2
p-Chlorotoluene	ND		ug/kg	250	14.	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	380	120	2
Hexachlorobutadiene	ND		ug/kg	500	21.	2
Isopropylbenzene	100	J	ug/kg	130	14.	2
p-Isopropyltoluene	1900		ug/kg	130	14.	2
Naphthalene	1500		ug/kg	500	82.	2
Acrylonitrile	ND		ug/kg	500	140	2

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	440		ug/kg	130	22.	2
1,2,3-Trichlorobenzene	ND		ug/kg	250	41.	2
1,2,4-Trichlorobenzene	ND		ug/kg	250	34.	2
1,3,5-Trimethylbenzene	2200		ug/kg	250	24.	2
1,2,4-Trimethylbenzene	11000		ug/kg	250	42.	2
1,4-Dioxane	ND		ug/kg	13000	4400	2
p-Diethylbenzene	9000		ug/kg	250	22.	2
p-Ethyltoluene	2400		ug/kg	250	48.	2
1,2,4,5-Tetramethylbenzene	2100		ug/kg	250	24.	2
Ethyl ether	ND		ug/kg	250	43.	2
trans-1,4-Dichloro-2-butene	ND		ug/kg	630	180	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	146	Q	70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 03:17
 Analyst: MV
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	320	150	1
1,1-Dichloroethane	ND		ug/kg	64	9.3	1
Chloroform	ND		ug/kg	96	9.0	1
Carbon tetrachloride	ND		ug/kg	64	15.	1
1,2-Dichloropropane	ND		ug/kg	64	8.0	1
Dibromochloromethane	ND		ug/kg	64	9.0	1
1,1,2-Trichloroethane	ND		ug/kg	64	17.	1
Tetrachloroethene	ND		ug/kg	32	12.	1
Chlorobenzene	ND		ug/kg	32	8.2	1
Trichlorofluoromethane	ND		ug/kg	260	45.	1
1,2-Dichloroethane	ND		ug/kg	64	16.	1
1,1,1-Trichloroethane	ND		ug/kg	32	11.	1
Bromodichloromethane	ND		ug/kg	32	7.0	1
trans-1,3-Dichloropropene	ND		ug/kg	64	18.	1
cis-1,3-Dichloropropene	ND		ug/kg	32	10.	1
1,3-Dichloropropene, Total	ND		ug/kg	32	10.	1
1,1-Dichloropropene	ND		ug/kg	32	10.	1
Bromoform	ND		ug/kg	260	16.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	32	11.	1
Benzene	28	J	ug/kg	32	11.	1
Toluene	160		ug/kg	64	35.	1
Ethylbenzene	79		ug/kg	64	9.0	1
Chloromethane	ND		ug/kg	260	60.	1
Bromomethane	ND		ug/kg	130	37.	1
Vinyl chloride	ND		ug/kg	64	22.	1
Chloroethane	ND		ug/kg	130	29.	1
1,1-Dichloroethene	ND		ug/kg	64	15.	1
trans-1,2-Dichloroethene	ND		ug/kg	96	8.8	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-06

Date Collected: 12/26/18 12:05

Client ID: RB12_9-10

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	32	8.8	1
1,2-Dichlorobenzene	ND		ug/kg	130	9.2	1
1,3-Dichlorobenzene	ND		ug/kg	130	9.5	1
1,4-Dichlorobenzene	ND		ug/kg	130	11.	1
Methyl tert butyl ether	ND		ug/kg	130	13.	1
p/m-Xylene	160		ug/kg	130	36.	1
o-Xylene	53	J	ug/kg	64	19.	1
Xylenes, Total	210	J	ug/kg	64	19.	1
cis-1,2-Dichloroethene	ND		ug/kg	64	11.	1
1,2-Dichloroethene, Total	ND		ug/kg	64	8.8	1
Dibromomethane	ND		ug/kg	130	15.	1
Styrene	ND		ug/kg	64	12.	1
Dichlorodifluoromethane	ND		ug/kg	640	59.	1
Acetone	ND		ug/kg	640	310	1
Carbon disulfide	ND		ug/kg	640	290	1
2-Butanone	ND		ug/kg	640	140	1
Vinyl acetate	ND		ug/kg	640	140	1
4-Methyl-2-pentanone	ND		ug/kg	640	82.	1
1,2,3-Trichloropropane	ND		ug/kg	130	8.2	1
2-Hexanone	ND		ug/kg	640	76.	1
Bromochloromethane	ND		ug/kg	130	13.	1
2,2-Dichloropropane	ND		ug/kg	130	13.	1
1,2-Dibromoethane	ND		ug/kg	64	18.	1
1,3-Dichloropropane	ND		ug/kg	130	11.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	32	8.5	1
Bromobenzene	ND		ug/kg	130	9.3	1
n-Butylbenzene	70		ug/kg	64	11.	1
sec-Butylbenzene	93		ug/kg	64	9.4	1
tert-Butylbenzene	ND		ug/kg	130	7.6	1
o-Chlorotoluene	ND		ug/kg	130	12.	1
p-Chlorotoluene	ND		ug/kg	130	6.9	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	190	64.	1
Hexachlorobutadiene	ND		ug/kg	260	11.	1
Isopropylbenzene	30	J	ug/kg	64	7.0	1
p-Isopropyltoluene	42	J	ug/kg	64	7.0	1
Naphthalene	1000		ug/kg	260	42.	1
Acrylonitrile	ND		ug/kg	260	74.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	74		ug/kg	64	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	130	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	130	17.	1
1,3,5-Trimethylbenzene	180		ug/kg	130	12.	1
1,2,4-Trimethylbenzene	540		ug/kg	130	21.	1
1,4-Dioxane	ND		ug/kg	6400	2200	1
p-Diethylbenzene	210		ug/kg	130	11.	1
p-Ethyltoluene	270		ug/kg	130	25.	1
1,2,4,5-Tetramethylbenzene	38	J	ug/kg	130	12.	1
Ethyl ether	ND		ug/kg	130	22.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	320	91.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 20:57
 Analyst: AD
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	0.20	J	ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	0.22	J	ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	0.48		ug/kg	0.48	0.16	1
Toluene	1.0		ug/kg	0.95	0.52	1
Ethylbenzene	0.47	J	ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
Client ID: RB12_10-12
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.95	0.28	1
Xylenes, Total	ND		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	ND		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
Vinyl acetate	ND		ug/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.95	0.16	1
sec-Butylbenzene	0.18	J	ug/kg	0.95	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.10	1
Naphthalene	1.5	J	ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
Client ID: RB12_10-12
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	0.43	J	ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	1.2	J	ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	95	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	0.47	J	ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 21:24
 Analyst: AD
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.9	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.59	0.23	1
Chlorobenzene	ND		ug/kg	0.59	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.82	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.59	0.20	1
Bromodichloromethane	ND		ug/kg	0.59	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.59	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.59	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.59	0.19	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.59	0.20	1
Benzene	ND		ug/kg	0.59	0.20	1
Toluene	ND		ug/kg	1.2	0.64	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.4	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.4	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-08

Date Collected: 12/26/18 13:25

Client ID: RB02_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.59	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.66	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.59	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.22	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.7	0.76	1
Acrylonitrile	ND		ug/kg	4.7	1.4	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
Client ID: RB02_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.39	1
1,4-Dioxane	ND		ug/kg	120	41.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.45	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.22	1
Ethyl ether	ND		ug/kg	2.4	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 21:52
 Analyst: AD
 Percent Solids: 70%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.8	4.0	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.26	1
Chloroform	0.46	J	ug/kg	2.6	0.25	1
Carbon tetrachloride	ND		ug/kg	1.8	0.40	1
1,2-Dichloropropane	ND		ug/kg	1.8	0.22	1
Dibromochloromethane	ND		ug/kg	1.8	0.25	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.47	1
Tetrachloroethene	1.7		ug/kg	0.88	0.34	1
Chlorobenzene	ND		ug/kg	0.88	0.22	1
Trichlorofluoromethane	ND		ug/kg	7.0	1.2	1
1,2-Dichloroethane	ND		ug/kg	1.8	0.45	1
1,1,1-Trichloroethane	ND		ug/kg	0.88	0.29	1
Bromodichloromethane	ND		ug/kg	0.88	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.8	0.48	1
cis-1,3-Dichloropropene	ND		ug/kg	0.88	0.28	1
1,3-Dichloropropene, Total	ND		ug/kg	0.88	0.28	1
1,1-Dichloropropene	ND		ug/kg	0.88	0.28	1
Bromoform	ND		ug/kg	7.0	0.43	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.88	0.29	1
Benzene	0.36	J	ug/kg	0.88	0.29	1
Toluene	ND		ug/kg	1.8	0.96	1
Ethylbenzene	0.28	J	ug/kg	1.8	0.25	1
Chloromethane	ND		ug/kg	7.0	1.6	1
Bromomethane	ND		ug/kg	3.5	1.0	1
Vinyl chloride	ND		ug/kg	1.8	0.59	1
Chloroethane	ND		ug/kg	3.5	0.80	1
1,1-Dichloroethene	ND		ug/kg	1.8	0.42	1
trans-1,2-Dichloroethene	ND		ug/kg	2.6	0.24	1

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09

Date Collected: 12/26/18 13:30

Client ID: RB02_7-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.88	0.24	1
1,2-Dichlorobenzene	ND		ug/kg	3.5	0.25	1
1,3-Dichlorobenzene	ND		ug/kg	3.5	0.26	1
1,4-Dichlorobenzene	ND		ug/kg	3.5	0.30	1
Methyl tert butyl ether	ND		ug/kg	3.5	0.35	1
p/m-Xylene	1.2	J	ug/kg	3.5	0.99	1
o-Xylene	0.53	J	ug/kg	1.8	0.51	1
Xylenes, Total	1.7	J	ug/kg	1.8	0.51	1
cis-1,2-Dichloroethene	ND		ug/kg	1.8	0.31	1
1,2-Dichloroethene, Total	ND		ug/kg	1.8	0.24	1
Dibromomethane	ND		ug/kg	3.5	0.42	1
Styrene	ND		ug/kg	1.8	0.34	1
Dichlorodifluoromethane	ND		ug/kg	18	1.6	1
Acetone	11	J	ug/kg	18	8.5	1
Carbon disulfide	ND		ug/kg	18	8.0	1
2-Butanone	ND		ug/kg	18	3.9	1
Vinyl acetate	ND		ug/kg	18	3.8	1
4-Methyl-2-pentanone	ND		ug/kg	18	2.2	1
1,2,3-Trichloropropane	ND		ug/kg	3.5	0.22	1
2-Hexanone	ND		ug/kg	18	2.1	1
Bromochloromethane	ND		ug/kg	3.5	0.36	1
2,2-Dichloropropane	ND		ug/kg	3.5	0.36	1
1,2-Dibromoethane	ND		ug/kg	1.8	0.49	1
1,3-Dichloropropane	ND		ug/kg	3.5	0.29	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.88	0.23	1
Bromobenzene	ND		ug/kg	3.5	0.26	1
n-Butylbenzene	ND		ug/kg	1.8	0.29	1
sec-Butylbenzene	ND		ug/kg	1.8	0.26	1
tert-Butylbenzene	ND		ug/kg	3.5	0.21	1
o-Chlorotoluene	ND		ug/kg	3.5	0.34	1
p-Chlorotoluene	ND		ug/kg	3.5	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	1.8	1
Hexachlorobutadiene	ND		ug/kg	7.0	0.30	1
Isopropylbenzene	ND		ug/kg	1.8	0.19	1
p-Isopropyltoluene	ND		ug/kg	1.8	0.19	1
Naphthalene	10		ug/kg	7.0	1.1	1
Acrylonitrile	ND		ug/kg	7.0	2.0	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.8	0.30	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.5	0.57	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.5	0.48	1
1,3,5-Trimethylbenzene	0.41	J	ug/kg	3.5	0.34	1
1,2,4-Trimethylbenzene	0.62	J	ug/kg	3.5	0.59	1
1,4-Dioxane	ND		ug/kg	180	62.	1
p-Diethylbenzene	ND		ug/kg	3.5	0.31	1
p-Ethyltoluene	ND		ug/kg	3.5	0.68	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.5	0.34	1
Ethyl ether	ND		ug/kg	3.5	0.60	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.8	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 22:19
 Analyst: MV
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.6	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.92	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.92	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.92	0.12	1
Dibromochloromethane	ND		ug/kg	0.92	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.92	0.24	1
Tetrachloroethene	ND		ug/kg	0.46	0.18	1
Chlorobenzene	ND		ug/kg	0.46	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.64	1
1,2-Dichloroethane	ND		ug/kg	0.92	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.15	1
Bromodichloromethane	ND		ug/kg	0.46	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.92	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.46	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.46	0.15	1
Bromoform	ND		ug/kg	3.7	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1
Benzene	0.17	J	ug/kg	0.46	0.15	1
Toluene	ND		ug/kg	0.92	0.50	1
Ethylbenzene	ND		ug/kg	0.92	0.13	1
Chloromethane	ND		ug/kg	3.7	0.86	1
Bromomethane	ND		ug/kg	1.8	0.54	1
Vinyl chloride	ND		ug/kg	0.92	0.31	1
Chloroethane	ND		ug/kg	1.8	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.92	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-10

Date Collected: 12/26/18 13:35

Client ID: RB02_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.46	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.52	1
o-Xylene	ND		ug/kg	0.92	0.27	1
Xylenes, Total	ND		ug/kg	0.92	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.92	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.92	0.13	1
Dibromomethane	ND		ug/kg	1.8	0.22	1
Styrene	ND		ug/kg	0.92	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.2	0.84	1
Acetone	12		ug/kg	9.2	4.4	1
Carbon disulfide	ND		ug/kg	9.2	4.2	1
2-Butanone	ND		ug/kg	9.2	2.0	1
Vinyl acetate	ND		ug/kg	9.2	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.2	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.12	1
2-Hexanone	ND		ug/kg	9.2	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.92	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.46	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.92	0.15	1
sec-Butylbenzene	ND		ug/kg	0.92	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
o-Chlorotoluene	ND		ug/kg	1.8	0.18	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.92	1
Hexachlorobutadiene	ND		ug/kg	3.7	0.16	1
Isopropylbenzene	ND		ug/kg	0.92	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.92	0.10	1
Naphthalene	ND		ug/kg	3.7	0.60	1
Acrylonitrile	ND		ug/kg	3.7	1.0	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
Client ID: RB02_10-12
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.92	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.31	1
1,4-Dioxane	ND		ug/kg	92	32.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.35	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.18	1
Ethyl ether	ND		ug/kg	1.8	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.6	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 22:47
 Analyst: MV
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	0.38	J	ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.58	1
Ethylbenzene	0.51	J	ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.2	0.62	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.98	1
Acetone	43		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	7.6	J	ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	0.22	J	ug/kg	1.1	0.18	1
sec-Butylbenzene	0.83	J	ug/kg	1.1	0.16	1
tert-Butylbenzene	0.22	J	ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.20	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	0.62	J	ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	4.5		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
Client ID: RB02_13-15
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.28	J	ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	0.87	J	ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.20	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-12
 Client ID: SOTB02_122618
 Sample Location: BRONX, NY

Date Collected: 12/26/18 00:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 16:16
 Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-12
 Client ID: SOTB02_122618
 Sample Location: BRONX, NY

Date Collected: 12/26/18 00:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-12
 Client ID: SOTB02_122618
 Sample Location: BRONX, NY

Date Collected: 12/26/18 00:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 09:56
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1194042-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 09:56
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1194042-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 09:56
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1194042-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/19 19:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02,07-11 Batch: WG1194592-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 19:06
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02,07-11 Batch: WG1194592-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/03/19 19:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02,07-11 Batch: WG1194592-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/19 18:48
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1194605-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/19 18:48
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1194605-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 18:48
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1194605-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/04/19 07:56
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1194817-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/19 07:56
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1194817-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/04/19 07:56
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1194817-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1194042-3 WG1194042-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	100		110		63-132	10		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	100		110		63-130	10		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		110		75-130	10		20
Trichlorofluoromethane	100		110		62-150	10		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	100		110		70-130	10		20
cis-1,3-Dichloropropene	100		110		70-130	10		20
1,1-Dichloropropene	100		110		70-130	10		20
Bromoform	100		100		54-136	0		20
1,1,1,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	100		110		70-130	10		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	90		92		64-130	2		20
Bromomethane	48		50		39-139	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1194042-3 WG1194042-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	100		110		55-138	10		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Trichloroethene	100		110		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	99		100		70-130	1		20
Methyl tert butyl ether	100		110		63-130	10		20
p/m-Xylene	100		110		70-130	10		20
o-Xylene	100		110		70-130	10		20
cis-1,2-Dichloroethene	100		110		70-130	10		20
Dibromomethane	100		110		70-130	10		20
1,2,3-Trichloropropane	110		120		64-130	9		20
Acrylonitrile	97		110		70-130	13		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	130		130		58-148	0		20
Carbon disulfide	100		110		51-130	10		20
2-Butanone	83		84		63-138	1		20
Vinyl acetate	110		120		70-130	9		20
4-Methyl-2-pentanone	96		100		59-130	4		20
2-Hexanone	98		110		57-130	12		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1194042-3 WG1194042-4								
Bromochloromethane	110		120		70-130	9		20
2,2-Dichloropropane	100		110		63-133	10		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	100		110		70-130	10		20
tert-Butylbenzene	100		110		70-130	10		20
o-Chlorotoluene	93		97		70-130	4		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	94		100		41-144	6		20
Hexachlorobutadiene	110		110		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	96		100		70-130	4		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	98		100		70-130	2		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	128		126		56-162	2		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853111

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1194042-3 WG1194042-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	110		110		59-134	0		20
trans-1,4-Dichloro-2-butene	94		97		70-130	3		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	108		109		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	104		101		70-130
Dibromofluoromethane	103		104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,07-11 Batch: WG1194592-3 WG1194592-4								
Methylene chloride	84		81		70-130	4		30
1,1-Dichloroethane	93		90		70-130	3		30
Chloroform	90		88		70-130	2		30
Carbon tetrachloride	92		91		70-130	1		30
1,2-Dichloropropane	92		90		70-130	2		30
Dibromochloromethane	92		96		70-130	4		30
1,1,2-Trichloroethane	97		99		70-130	2		30
Tetrachloroethene	101		103		70-130	2		30
Chlorobenzene	96		92		70-130	4		30
Trichlorofluoromethane	90		85		70-139	6		30
1,2-Dichloroethane	92		90		70-130	2		30
1,1,1-Trichloroethane	96		94		70-130	2		30
Bromodichloromethane	92		91		70-130	1		30
trans-1,3-Dichloropropene	93		96		70-130	3		30
cis-1,3-Dichloropropene	87		86		70-130	1		30
1,1-Dichloropropene	105		102		70-130	3		30
Bromoform	97		91		70-130	6		30
1,1,2,2-Tetrachloroethane	95		91		70-130	4		30
Benzene	93		90		70-130	3		30
Toluene	102		102		70-130	0		30
Ethylbenzene	105		100		70-130	5		30
Chloromethane	87		81		52-130	7		30
Bromomethane	72		69		57-147	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,07-11 Batch: WG1194592-3 WG1194592-4								
Vinyl chloride	87		82		67-130	6		30
Chloroethane	83		78		50-151	6		30
1,1-Dichloroethene	77		82		65-135	6		30
trans-1,2-Dichloroethene	87		86		70-130	1		30
Trichloroethene	94		92		70-130	2		30
1,2-Dichlorobenzene	95		86		70-130	10		30
1,3-Dichlorobenzene	99		98		70-130	1		30
1,4-Dichlorobenzene	95		93		70-130	2		30
Methyl tert butyl ether	87		87		66-130	0		30
p/m-Xylene	106		99		70-130	7		30
o-Xylene	99		99		70-130	0		30
cis-1,2-Dichloroethene	88		87		70-130	1		30
Dibromomethane	89		89		70-130	0		30
Styrene	90		88		70-130	2		30
Dichlorodifluoromethane	60		57		30-146	5		30
Acetone	100		101		54-140	1		30
Carbon disulfide	78		82		59-130	5		30
2-Butanone	87		93		70-130	7		30
Vinyl acetate	103		102		70-130	1		30
4-Methyl-2-pentanone	87		94		70-130	8		30
1,2,3-Trichloropropane	96		94		68-130	2		30
2-Hexanone	90		99		70-130	10		30
Bromochloromethane	86		86		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,07-11 Batch: WG1194592-3 WG1194592-4								
2,2-Dichloropropane	98		96		70-130	2		30
1,2-Dibromoethane	95		100		70-130	5		30
1,3-Dichloropropane	98		102		69-130	4		30
1,1,1,2-Tetrachloroethane	97		94		70-130	3		30
Bromobenzene	99		92		70-130	7		30
n-Butylbenzene	108		102		70-130	6		30
sec-Butylbenzene	103		101		70-130	2		30
tert-Butylbenzene	113		108		70-130	5		30
o-Chlorotoluene	104		97		70-130	7		30
p-Chlorotoluene	111		101		70-130	9		30
1,2-Dibromo-3-chloropropane	84		87		68-130	4		30
Hexachlorobutadiene	99		95		67-130	4		30
Isopropylbenzene	115		106		70-130	8		30
p-Isopropyltoluene	109		106		70-130	3		30
Naphthalene	90		87		70-130	3		30
Acrylonitrile	80		83		70-130	4		30
n-Propylbenzene	112		100		70-130	11		30
1,2,3-Trichlorobenzene	93		89		70-130	4		30
1,2,4-Trichlorobenzene	98		94		70-130	4		30
1,3,5-Trimethylbenzene	110		103		70-130	7		30
1,2,4-Trimethylbenzene	114		111		70-130	3		30
1,4-Dioxane	104		110		65-136	6		30
p-Diethylbenzene	105		100		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,07-11 Batch: WG1194592-3 WG1194592-4								
p-Ethyltoluene	108		98		70-130	10		30
1,2,4,5-Tetramethylbenzene	92		86		70-130	7		30
Ethyl ether	76		73		67-130	4		30
trans-1,4-Dichloro-2-butene	98		88		70-130	11		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	107		105		70-130
Toluene-d8	108		113		70-130
4-Bromofluorobenzene	111		104		70-130
Dibromofluoromethane	97		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1194605-3 WG1194605-4								
Methylene chloride	85		84		70-130	1		30
1,1-Dichloroethane	87		86		70-130	1		30
Chloroform	92		93		70-130	1		30
Carbon tetrachloride	97		96		70-130	1		30
1,2-Dichloropropane	88		88		70-130	0		30
Dibromochloromethane	96		96		70-130	0		30
1,1,2-Trichloroethane	93		95		70-130	2		30
Tetrachloroethene	92		93		70-130	1		30
Chlorobenzene	90		91		70-130	1		30
Trichlorofluoromethane	63	Q	64	Q	70-139	2		30
1,2-Dichloroethane	88		89		70-130	1		30
1,1,1-Trichloroethane	99		100		70-130	1		30
Bromodichloromethane	101		104		70-130	3		30
trans-1,3-Dichloropropene	101		102		70-130	1		30
cis-1,3-Dichloropropene	105		106		70-130	1		30
1,1-Dichloropropene	101		101		70-130	0		30
Bromoform	96		94		70-130	2		30
1,1,1,2-Tetrachloroethane	99		98		70-130	1		30
Benzene	95		94		70-130	1		30
Toluene	91		90		70-130	1		30
Ethylbenzene	94		94		70-130	0		30
Chloromethane	70		69		52-130	1		30
Bromomethane	42	Q	46	Q	57-147	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1194605-3 WG1194605-4								
Vinyl chloride	63	Q	63	Q	67-130	0		30
Chloroethane	48	Q	48	Q	50-151	0		30
1,1-Dichloroethene	95		98		65-135	3		30
trans-1,2-Dichloroethene	94		95		70-130	1		30
Trichloroethene	97		96		70-130	1		30
1,2-Dichlorobenzene	89		88		70-130	1		30
1,3-Dichlorobenzene	90		89		70-130	1		30
1,4-Dichlorobenzene	88		88		70-130	0		30
Methyl tert butyl ether	104		104		66-130	0		30
p/m-Xylene	92		92		70-130	0		30
o-Xylene	94		94		70-130	0		30
cis-1,2-Dichloroethene	95		95		70-130	0		30
Dibromomethane	100		100		70-130	0		30
Styrene	87		86		70-130	1		30
Dichlorodifluoromethane	90		90		30-146	0		30
Acetone	117		111		54-140	5		30
Carbon disulfide	88		88		59-130	0		30
2-Butanone	93		89		70-130	4		30
Vinyl acetate	53	Q	64	Q	70-130	19		30
4-Methyl-2-pentanone	99		97		70-130	2		30
1,2,3-Trichloropropane	96		94		68-130	2		30
2-Hexanone	102		97		70-130	5		30
Bromochloromethane	98		98		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1194605-3 WG1194605-4								
2,2-Dichloropropane	102		101		70-130	1		30
1,2-Dibromoethane	99		99		70-130	0		30
1,3-Dichloropropane	96		96		69-130	0		30
1,1,1,2-Tetrachloroethane	95		95		70-130	0		30
Bromobenzene	92		91		70-130	1		30
n-Butylbenzene	93		92		70-130	1		30
sec-Butylbenzene	95		94		70-130	1		30
tert-Butylbenzene	95		94		70-130	1		30
o-Chlorotoluene	96		93		70-130	3		30
p-Chlorotoluene	98		97		70-130	1		30
1,2-Dibromo-3-chloropropane	105		102		68-130	3		30
Hexachlorobutadiene	91		91		67-130	0		30
Isopropylbenzene	97		96		70-130	1		30
p-Isopropyltoluene	95		94		70-130	1		30
Naphthalene	97		96		70-130	1		30
Acrylonitrile	86		86		70-130	0		30
n-Propylbenzene	95		94		70-130	1		30
1,2,3-Trichlorobenzene	91		92		70-130	1		30
1,2,4-Trichlorobenzene	91		91		70-130	0		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	95		95		70-130	0		30
1,4-Dioxane	99		101		65-136	2		30
p-Diethylbenzene	95		93		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1194605-3 WG1194605-4								
p-Ethyltoluene	98		98		70-130	0		30
1,2,4,5-Tetramethylbenzene	96		95		70-130	1		30
Ethyl ether	71		71		67-130	0		30
trans-1,4-Dichloro-2-butene	100		96		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		100		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	117		116		70-130
Dibromofluoromethane	102		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1194817-3 WG1194817-4								
Methylene chloride	86		84		70-130	2		30
1,1-Dichloroethane	87		86		70-130	1		30
Chloroform	95		95		70-130	0		30
Carbon tetrachloride	100		100		70-130	0		30
1,2-Dichloropropane	87		88		70-130	1		30
Dibromochloromethane	93		94		70-130	1		30
1,1,2-Trichloroethane	91		92		70-130	1		30
Tetrachloroethene	97		94		70-130	3		30
Chlorobenzene	93		92		70-130	1		30
Trichlorofluoromethane	74		75		70-139	1		30
1,2-Dichloroethane	87		89		70-130	2		30
1,1,1-Trichloroethane	102		101		70-130	1		30
Bromodichloromethane	101		102		70-130	1		30
trans-1,3-Dichloropropene	98		97		70-130	1		30
cis-1,3-Dichloropropene	104		105		70-130	1		30
1,1-Dichloropropene	102		100		70-130	2		30
Bromoform	91		92		70-130	1		30
1,1,2,2-Tetrachloroethane	94		95		70-130	1		30
Benzene	96		95		70-130	1		30
Toluene	93		91		70-130	2		30
Ethylbenzene	95		94		70-130	1		30
Chloromethane	71		68		52-130	4		30
Bromomethane	57		56	Q	57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1194817-3 WG1194817-4								
Vinyl chloride	70		70		67-130	0		30
Chloroethane	56		55		50-151	2		30
1,1-Dichloroethene	99		97		65-135	2		30
trans-1,2-Dichloroethene	98		96		70-130	2		30
Trichloroethene	98		98		70-130	0		30
1,2-Dichlorobenzene	90		89		70-130	1		30
1,3-Dichlorobenzene	91		90		70-130	1		30
1,4-Dichlorobenzene	90		89		70-130	1		30
Methyl tert butyl ether	101		103		66-130	2		30
p/m-Xylene	94		93		70-130	1		30
o-Xylene	97		95		70-130	2		30
cis-1,2-Dichloroethene	98		98		70-130	0		30
Dibromomethane	98		100		70-130	2		30
Styrene	87		87		70-130	0		30
Dichlorodifluoromethane	91		88		30-146	3		30
Acetone	109		101		54-140	8		30
Carbon disulfide	91		89		59-130	2		30
2-Butanone	80		93		70-130	15		30
Vinyl acetate	88		92		70-130	4		30
4-Methyl-2-pentanone	86		88		70-130	2		30
1,2,3-Trichloropropane	88		91		68-130	3		30
2-Hexanone	94		94		70-130	0		30
Bromochloromethane	98		99		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1194817-3 WG1194817-4								
2,2-Dichloropropane	103		102		70-130	1		30
1,2-Dibromoethane	96		97		70-130	1		30
1,3-Dichloropropane	94		94		69-130	0		30
1,1,1,2-Tetrachloroethane	96		96		70-130	0		30
Bromobenzene	93		92		70-130	1		30
n-Butylbenzene	94		92		70-130	2		30
sec-Butylbenzene	96		93		70-130	3		30
tert-Butylbenzene	96		94		70-130	2		30
o-Chlorotoluene	94		94		70-130	0		30
p-Chlorotoluene	96		96		70-130	0		30
1,2-Dibromo-3-chloropropane	95		98		68-130	3		30
Hexachlorobutadiene	92		89		67-130	3		30
Isopropylbenzene	97		95		70-130	2		30
p-Isopropyltoluene	96		94		70-130	2		30
Naphthalene	94		95		70-130	1		30
Acrylonitrile	75		78		70-130	4		30
n-Propylbenzene	94		92		70-130	2		30
1,2,3-Trichlorobenzene	92		92		70-130	0		30
1,2,4-Trichlorobenzene	93		92		70-130	1		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	97		95		70-130	2		30
1,4-Dioxane	90		94		65-136	4		30
p-Diethylbenzene	95		93		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1194817-3 WG1194817-4								
p-Ethyltoluene	100		98		70-130	2		30
1,2,4,5-Tetramethylbenzene	96		95		70-130	1		30
Ethyl ether	75		76		67-130	1		30
trans-1,4-Dichloro-2-butene	85		87		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		97		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	111		111		70-130
Dibromofluoromethane	102		104		70-130

SEMIVOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01 D
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 21:49
 Analyst: ALS
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	1400	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	200	10
Hexachlorobenzene	ND		ug/kg	1000	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	240	10
2-Chloronaphthalene	ND		ug/kg	1800	170	10
1,2-Dichlorobenzene	ND		ug/kg	1800	310	10
1,3-Dichlorobenzene	ND		ug/kg	1800	300	10
1,4-Dichlorobenzene	ND		ug/kg	1800	310	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	470	10
2,4-Dinitrotoluene	ND		ug/kg	1800	350	10
2,6-Dinitrotoluene	ND		ug/kg	1800	300	10
Fluoranthene	1400		ug/kg	1000	200	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	190	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	270	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2100	300	10
Bis(2-chloroethoxy)methane	ND		ug/kg	1900	180	10
Hexachlorobutadiene	ND		ug/kg	1800	260	10
Hexachlorocyclopentadiene	ND		ug/kg	5000	1600	10
Hexachloroethane	ND		ug/kg	1400	280	10
Isophorone	ND		ug/kg	1600	230	10
Naphthalene	760	J	ug/kg	1800	210	10
Nitrobenzene	ND		ug/kg	1600	260	10
NDPA/DPA	ND		ug/kg	1400	200	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	270	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	610	10
Butyl benzyl phthalate	ND		ug/kg	1800	440	10
Di-n-butylphthalate	ND		ug/kg	1800	330	10
Di-n-octylphthalate	ND		ug/kg	1800	600	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01 D
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	160	10
Dimethyl phthalate	ND		ug/kg	1800	370	10
Benzo(a)anthracene	1000		ug/kg	1000	200	10
Benzo(a)pyrene	1400		ug/kg	1400	430	10
Benzo(b)fluoranthene	1700		ug/kg	1000	300	10
Benzo(k)fluoranthene	580	J	ug/kg	1000	280	10
Chrysene	1100		ug/kg	1000	180	10
Acenaphthylene	400	J	ug/kg	1400	270	10
Anthracene	ND		ug/kg	1000	340	10
Benzo(ghi)perylene	1400		ug/kg	1400	210	10
Fluorene	ND		ug/kg	1800	170	10
Phenanthrene	490	J	ug/kg	1000	210	10
Dibenzo(a,h)anthracene	280	J	ug/kg	1000	200	10
Indeno(1,2,3-cd)pyrene	1300	J	ug/kg	1400	240	10
Pyrene	1400		ug/kg	1000	170	10
Biphenyl	ND		ug/kg	4000	410	10
4-Chloroaniline	ND		ug/kg	1800	320	10
2-Nitroaniline	ND		ug/kg	1800	340	10
3-Nitroaniline	ND		ug/kg	1800	330	10
4-Nitroaniline	ND		ug/kg	1800	720	10
Dibenzofuran	ND		ug/kg	1800	160	10
2-Methylnaphthalene	370	J	ug/kg	2100	210	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	180	10
Acetophenone	380	J	ug/kg	1800	220	10
2,4,6-Trichlorophenol	ND		ug/kg	1000	330	10
p-Chloro-m-cresol	ND		ug/kg	1800	260	10
2-Chlorophenol	ND		ug/kg	1800	210	10
2,4-Dichlorophenol	ND		ug/kg	1600	280	10
2,4-Dimethylphenol	ND		ug/kg	1800	580	10
2-Nitrophenol	ND		ug/kg	3800	660	10
4-Nitrophenol	ND		ug/kg	2400	720	10
2,4-Dinitrophenol	ND		ug/kg	8400	820	10
4,6-Dinitro-o-cresol	ND		ug/kg	4600	840	10
Pentachlorophenol	ND		ug/kg	1400	380	10
Phenol	ND		ug/kg	1800	260	10
2-Methylphenol	ND		ug/kg	1800	270	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2500	270	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01 D
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	340	10
Benzoic Acid	ND		ug/kg	5700	1800	10
Benzyl Alcohol	ND		ug/kg	1800	540	10
Carbazole	ND		ug/kg	1800	170	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	65		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02 D
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 22:15
 Analyst: ALS
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	1500	190	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	210	10
Hexachlorobenzene	ND		ug/kg	1100	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	250	10
2-Chloronaphthalene	ND		ug/kg	1800	180	10
1,2-Dichlorobenzene	ND		ug/kg	1800	330	10
1,3-Dichlorobenzene	ND		ug/kg	1800	320	10
1,4-Dichlorobenzene	ND		ug/kg	1800	320	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	490	10
2,4-Dinitrotoluene	ND		ug/kg	1800	370	10
2,6-Dinitrotoluene	ND		ug/kg	1800	310	10
Fluoranthene	650	J	ug/kg	1100	210	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	200	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	280	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2200	310	10
Bis(2-chloroethoxy)methane	ND		ug/kg	2000	180	10
Hexachlorobutadiene	ND		ug/kg	1800	270	10
Hexachlorocyclopentadiene	ND		ug/kg	5200	1600	10
Hexachloroethane	ND		ug/kg	1500	300	10
Isophorone	ND		ug/kg	1600	240	10
Naphthalene	ND		ug/kg	1800	220	10
Nitrobenzene	ND		ug/kg	1600	270	10
NDPA/DPA	ND		ug/kg	1500	210	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	280	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	630	10
Butyl benzyl phthalate	ND		ug/kg	1800	460	10
Di-n-butylphthalate	ND		ug/kg	1800	350	10
Di-n-octylphthalate	ND		ug/kg	1800	620	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-02 D

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	170	10
Dimethyl phthalate	ND		ug/kg	1800	380	10
Benzo(a)anthracene	520	J	ug/kg	1100	210	10
Benzo(a)pyrene	630	J	ug/kg	1500	450	10
Benzo(b)fluoranthene	700	J	ug/kg	1100	310	10
Benzo(k)fluoranthene	ND		ug/kg	1100	290	10
Chrysene	470	J	ug/kg	1100	190	10
Acenaphthylene	ND		ug/kg	1500	280	10
Anthracene	ND		ug/kg	1100	360	10
Benzo(ghi)perylene	700	J	ug/kg	1500	220	10
Fluorene	ND		ug/kg	1800	180	10
Phenanthrene	310	J	ug/kg	1100	220	10
Dibenzo(a,h)anthracene	ND		ug/kg	1100	210	10
Indeno(1,2,3-cd)pyrene	500	J	ug/kg	1500	260	10
Pyrene	720	J	ug/kg	1100	180	10
Biphenyl	ND		ug/kg	4200	420	10
4-Chloroaniline	ND		ug/kg	1800	330	10
2-Nitroaniline	ND		ug/kg	1800	350	10
3-Nitroaniline	ND		ug/kg	1800	340	10
4-Nitroaniline	ND		ug/kg	1800	760	10
Dibenzofuran	ND		ug/kg	1800	170	10
2-Methylnaphthalene	ND		ug/kg	2200	220	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	190	10
Acetophenone	ND		ug/kg	1800	230	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	350	10
p-Chloro-m-cresol	ND		ug/kg	1800	270	10
2-Chlorophenol	ND		ug/kg	1800	220	10
2,4-Dichlorophenol	ND		ug/kg	1600	290	10
2,4-Dimethylphenol	ND		ug/kg	1800	600	10
2-Nitrophenol	ND		ug/kg	4000	690	10
4-Nitrophenol	ND		ug/kg	2600	750	10
2,4-Dinitrophenol	ND		ug/kg	8800	850	10
4,6-Dinitro-o-cresol	ND		ug/kg	4800	880	10
Pentachlorophenol	ND		ug/kg	1500	400	10
Phenol	ND		ug/kg	1800	280	10
2-Methylphenol	ND		ug/kg	1800	280	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2600	290	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-02 D

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	350	10
Benzoic Acid	ND		ug/kg	5900	1800	10
Benzyl Alcohol	ND		ug/kg	1800	560	10
Carbazole	ND		ug/kg	1800	180	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		25-120
Phenol-d6	44		10-120
Nitrobenzene-d5	34		23-120
2-Fluorobiphenyl	43		30-120
2,4,6-Tribromophenol	25		10-136
4-Terphenyl-d14	38		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03 D
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 22:41
 Analyst: ALS
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	6500		ug/kg	1600	210	10
1,2,4-Trichlorobenzene	ND		ug/kg	2000	230	10
Hexachlorobenzene	ND		ug/kg	1200	220	10
Bis(2-chloroethyl)ether	ND		ug/kg	1800	270	10
2-Chloronaphthalene	ND		ug/kg	2000	200	10
1,2-Dichlorobenzene	ND		ug/kg	2000	360	10
1,3-Dichlorobenzene	ND		ug/kg	2000	340	10
1,4-Dichlorobenzene	ND		ug/kg	2000	350	10
3,3'-Dichlorobenzidine	ND		ug/kg	2000	530	10
2,4-Dinitrotoluene	ND		ug/kg	2000	400	10
2,6-Dinitrotoluene	ND		ug/kg	2000	340	10
Fluoranthene	16000		ug/kg	1200	230	10
4-Chlorophenyl phenyl ether	ND		ug/kg	2000	210	10
4-Bromophenyl phenyl ether	ND		ug/kg	2000	300	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2400	340	10
Bis(2-chloroethoxy)methane	ND		ug/kg	2200	200	10
Hexachlorobutadiene	ND		ug/kg	2000	290	10
Hexachlorocyclopentadiene	ND		ug/kg	5700	1800	10
Hexachloroethane	ND		ug/kg	1600	320	10
Isophorone	ND		ug/kg	1800	260	10
Naphthalene	3100		ug/kg	2000	240	10
Nitrobenzene	ND		ug/kg	1800	300	10
NDPA/DPA	ND		ug/kg	1600	230	10
n-Nitrosodi-n-propylamine	ND		ug/kg	2000	310	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	2000	690	10
Butyl benzyl phthalate	ND		ug/kg	2000	500	10
Di-n-butylphthalate	ND		ug/kg	2000	380	10
Di-n-octylphthalate	ND		ug/kg	2000	680	10

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03 D

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	2000	180	10
Dimethyl phthalate	ND		ug/kg	2000	420	10
Benzo(a)anthracene	8600		ug/kg	1200	220	10
Benzo(a)pyrene	9000		ug/kg	1600	490	10
Benzo(b)fluoranthene	6400		ug/kg	1200	340	10
Benzo(k)fluoranthene	1300		ug/kg	1200	320	10
Chrysene	8000		ug/kg	1200	210	10
Acenaphthylene	9800		ug/kg	1600	310	10
Anthracene	2600		ug/kg	1200	390	10
Benzo(ghi)perylene	5300		ug/kg	1600	230	10
Fluorene	11000		ug/kg	2000	190	10
Phenanthrene	3400		ug/kg	1200	240	10
Dibenzo(a,h)anthracene	780	J	ug/kg	1200	230	10
Indeno(1,2,3-cd)pyrene	3400		ug/kg	1600	280	10
Pyrene	31000		ug/kg	1200	200	10
Biphenyl	500	J	ug/kg	4500	460	10
4-Chloroaniline	ND		ug/kg	2000	360	10
2-Nitroaniline	ND		ug/kg	2000	380	10
3-Nitroaniline	ND		ug/kg	2000	380	10
4-Nitroaniline	ND		ug/kg	2000	820	10
Dibenzofuran	660	J	ug/kg	2000	190	10
2-Methylnaphthalene	610	J	ug/kg	2400	240	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	2000	210	10
Acetophenone	ND		ug/kg	2000	250	10
2,4,6-Trichlorophenol	ND		ug/kg	1200	380	10
p-Chloro-m-cresol	ND		ug/kg	2000	300	10
2-Chlorophenol	ND		ug/kg	2000	240	10
2,4-Dichlorophenol	ND		ug/kg	1800	320	10
2,4-Dimethylphenol	ND		ug/kg	2000	660	10
2-Nitrophenol	ND		ug/kg	4300	750	10
4-Nitrophenol	ND		ug/kg	2800	810	10
2,4-Dinitrophenol	ND		ug/kg	9600	930	10
4,6-Dinitro-o-cresol	ND		ug/kg	5200	960	10
Pentachlorophenol	ND		ug/kg	1600	440	10
Phenol	ND		ug/kg	2000	300	10
2-Methylphenol	ND		ug/kg	2000	310	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2900	310	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03 D
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	2000	380	10
Benzoic Acid	ND		ug/kg	6500	2000	10
Benzyl Alcohol	ND		ug/kg	2000	610	10
Carbazole	290	J	ug/kg	2000	190	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	63		10-136
4-Terphenyl-d14	64		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04 D
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 23:08
 Analyst: ALS
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	4000		ug/kg	1400	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	200	10
Hexachlorobenzene	ND		ug/kg	1100	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	240	10
2-Chloronaphthalene	ND		ug/kg	1800	180	10
1,2-Dichlorobenzene	ND		ug/kg	1800	320	10
1,3-Dichlorobenzene	ND		ug/kg	1800	310	10
1,4-Dichlorobenzene	ND		ug/kg	1800	310	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	480	10
2,4-Dinitrotoluene	ND		ug/kg	1800	360	10
2,6-Dinitrotoluene	ND		ug/kg	1800	310	10
Fluoranthene	41000		ug/kg	1100	200	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	190	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	270	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2100	300	10
Bis(2-chloroethoxy)methane	ND		ug/kg	1900	180	10
Hexachlorobutadiene	ND		ug/kg	1800	260	10
Hexachlorocyclopentadiene	ND		ug/kg	5100	1600	10
Hexachloroethane	ND		ug/kg	1400	290	10
Isophorone	ND		ug/kg	1600	230	10
Naphthalene	1200	J	ug/kg	1800	220	10
Nitrobenzene	ND		ug/kg	1600	260	10
NDPA/DPA	ND		ug/kg	1400	200	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	280	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	620	10
Butyl benzyl phthalate	ND		ug/kg	1800	450	10
Di-n-butylphthalate	ND		ug/kg	1800	340	10
Di-n-octylphthalate	ND		ug/kg	1800	610	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04 D
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	160	10
Dimethyl phthalate	ND		ug/kg	1800	380	10
Benzo(a)anthracene	20000		ug/kg	1100	200	10
Benzo(a)pyrene	19000		ug/kg	1400	440	10
Benzo(b)fluoranthene	24000		ug/kg	1100	300	10
Benzo(k)fluoranthene	8200		ug/kg	1100	290	10
Chrysene	18000		ug/kg	1100	190	10
Acenaphthylene	2000		ug/kg	1400	280	10
Anthracene	10000		ug/kg	1100	350	10
Benzo(ghi)perylene	11000		ug/kg	1400	210	10
Fluorene	3400		ug/kg	1800	170	10
Phenanthrene	35000		ug/kg	1100	220	10
Dibenzo(a,h)anthracene	2800		ug/kg	1100	210	10
Indeno(1,2,3-cd)pyrene	12000		ug/kg	1400	250	10
Pyrene	34000		ug/kg	1100	180	10
Biphenyl	ND		ug/kg	4100	420	10
4-Chloroaniline	ND		ug/kg	1800	320	10
2-Nitroaniline	ND		ug/kg	1800	340	10
3-Nitroaniline	ND		ug/kg	1800	340	10
4-Nitroaniline	ND		ug/kg	1800	740	10
Dibenzofuran	2600		ug/kg	1800	170	10
2-Methylnaphthalene	940	J	ug/kg	2100	220	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	190	10
Acetophenone	ND		ug/kg	1800	220	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	340	10
p-Chloro-m-cresol	ND		ug/kg	1800	270	10
2-Chlorophenol	ND		ug/kg	1800	210	10
2,4-Dichlorophenol	ND		ug/kg	1600	290	10
2,4-Dimethylphenol	ND		ug/kg	1800	590	10
2-Nitrophenol	ND		ug/kg	3900	670	10
4-Nitrophenol	ND		ug/kg	2500	730	10
2,4-Dinitrophenol	ND		ug/kg	8600	830	10
4,6-Dinitro-o-cresol	ND		ug/kg	4600	860	10
Pentachlorophenol	ND		ug/kg	1400	390	10
Phenol	ND		ug/kg	1800	270	10
2-Methylphenol	ND		ug/kg	1800	280	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2600	280	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-04 D

Date Collected: 12/26/18 11:55

Client ID: RB12_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	340	10
Benzoic Acid	ND		ug/kg	5800	1800	10
Benzyl Alcohol	ND		ug/kg	1800	550	10
Carbazole	2300		ug/kg	1800	170	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	53		10-136
4-Terphenyl-d14	70		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 23:34
 Analyst: ALS
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	820	J	ug/kg	1400	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	200	10
Hexachlorobenzene	ND		ug/kg	1100	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	240	10
2-Chloronaphthalene	ND		ug/kg	1800	180	10
1,2-Dichlorobenzene	ND		ug/kg	1800	320	10
1,3-Dichlorobenzene	ND		ug/kg	1800	300	10
1,4-Dichlorobenzene	ND		ug/kg	1800	310	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	470	10
2,4-Dinitrotoluene	ND		ug/kg	1800	360	10
2,6-Dinitrotoluene	ND		ug/kg	1800	300	10
Fluoranthene	23000		ug/kg	1100	200	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	190	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	270	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2100	300	10
Bis(2-chloroethoxy)methane	ND		ug/kg	1900	180	10
Hexachlorobutadiene	ND		ug/kg	1800	260	10
Hexachlorocyclopentadiene	ND		ug/kg	5100	1600	10
Hexachloroethane	ND		ug/kg	1400	290	10
Isophorone	ND		ug/kg	1600	230	10
Naphthalene	2700		ug/kg	1800	220	10
Nitrobenzene	ND		ug/kg	1600	260	10
NDPA/DPA	ND		ug/kg	1400	200	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	270	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	610	10
Butyl benzyl phthalate	ND		ug/kg	1800	450	10
Di-n-butylphthalate	ND		ug/kg	1800	340	10
Di-n-octylphthalate	ND		ug/kg	1800	600	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-05 D

Date Collected: 12/26/18 12:00

Client ID: RB12_8-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	160	10
Dimethyl phthalate	ND		ug/kg	1800	370	10
Benzo(a)anthracene	12000		ug/kg	1100	200	10
Benzo(a)pyrene	12000		ug/kg	1400	430	10
Benzo(b)fluoranthene	13000		ug/kg	1100	300	10
Benzo(k)fluoranthene	4700		ug/kg	1100	280	10
Chrysene	11000		ug/kg	1100	180	10
Acenaphthylene	6600		ug/kg	1400	270	10
Anthracene	5100		ug/kg	1100	350	10
Benzo(ghi)perylene	12000		ug/kg	1400	210	10
Fluorene	1500	J	ug/kg	1800	170	10
Phenanthrene	15000		ug/kg	1100	220	10
Dibenzo(a,h)anthracene	2000		ug/kg	1100	200	10
Indeno(1,2,3-cd)pyrene	10000		ug/kg	1400	250	10
Pyrene	22000		ug/kg	1100	180	10
Biphenyl	ND		ug/kg	4000	410	10
4-Chloroaniline	ND		ug/kg	1800	320	10
2-Nitroaniline	ND		ug/kg	1800	340	10
3-Nitroaniline	ND		ug/kg	1800	340	10
4-Nitroaniline	ND		ug/kg	1800	740	10
Dibenzofuran	770	J	ug/kg	1800	170	10
2-Methylnaphthalene	820	J	ug/kg	2100	210	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	180	10
Acetophenone	ND		ug/kg	1800	220	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	340	10
p-Chloro-m-cresol	ND		ug/kg	1800	260	10
2-Chlorophenol	ND		ug/kg	1800	210	10
2,4-Dichlorophenol	ND		ug/kg	1600	280	10
2,4-Dimethylphenol	ND		ug/kg	1800	590	10
2-Nitrophenol	ND		ug/kg	3800	670	10
4-Nitrophenol	ND		ug/kg	2500	720	10
2,4-Dinitrophenol	ND		ug/kg	8500	830	10
4,6-Dinitro-o-cresol	ND		ug/kg	4600	850	10
Pentachlorophenol	ND		ug/kg	1400	390	10
Phenol	ND		ug/kg	1800	270	10
2-Methylphenol	ND		ug/kg	1800	280	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2600	280	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	340	10
Benzoic Acid	ND		ug/kg	5800	1800	10
Benzyl Alcohol	ND		ug/kg	1800	540	10
Carbazole	520	J	ug/kg	1800	170	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	80		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 18:19
 Analyst: ALS
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	160		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	3100		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	530		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-06

Date Collected: 12/26/18 12:05

Client ID: RB12_9-10

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	2000		ug/kg	110	21.	1
Benzo(a)pyrene	2600		ug/kg	150	45.	1
Benzo(b)fluoranthene	3100		ug/kg	110	31.	1
Benzo(k)fluoranthene	1000		ug/kg	110	30.	1
Chrysene	1800		ug/kg	110	19.	1
Acenaphthylene	72	J	ug/kg	150	28.	1
Anthracene	350		ug/kg	110	36.	1
Benzo(ghi)perylene	2000		ug/kg	150	22.	1
Fluorene	130	J	ug/kg	180	18.	1
Phenanthrene	1200		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	380		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	2000		ug/kg	150	26.	1
Pyrene	3200		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	88	J	ug/kg	180	17.	1
2-Methylnaphthalene	74	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	82	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	83		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	92		10-136
4-Terphenyl-d14	73		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07 D
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 20:30
 Analyst: ALS
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1100		ug/kg	290	38.	2
1,2,4-Trichlorobenzene	ND		ug/kg	370	42.	2
Hexachlorobenzene	ND		ug/kg	220	41.	2
Bis(2-chloroethyl)ether	ND		ug/kg	330	50.	2
2-Chloronaphthalene	ND		ug/kg	370	36.	2
1,2-Dichlorobenzene	ND		ug/kg	370	66.	2
1,3-Dichlorobenzene	ND		ug/kg	370	63.	2
1,4-Dichlorobenzene	ND		ug/kg	370	64.	2
3,3'-Dichlorobenzidine	ND		ug/kg	370	97.	2
2,4-Dinitrotoluene	ND		ug/kg	370	73.	2
2,6-Dinitrotoluene	ND		ug/kg	370	63.	2
Fluoranthene	7600		ug/kg	220	42.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	370	39.	2
4-Bromophenyl phenyl ether	ND		ug/kg	370	56.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	440	62.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	400	37.	2
Hexachlorobutadiene	ND		ug/kg	370	54.	2
Hexachlorocyclopentadiene	ND		ug/kg	1000	330	2
Hexachloroethane	ND		ug/kg	290	59.	2
Isophorone	ND		ug/kg	330	48.	2
Naphthalene	2600		ug/kg	370	44.	2
Nitrobenzene	ND		ug/kg	330	54.	2
NDPA/DPA	ND		ug/kg	290	42.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	370	56.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	370	130	2
Butyl benzyl phthalate	ND		ug/kg	370	92.	2
Di-n-butylphthalate	ND		ug/kg	370	69.	2
Di-n-octylphthalate	ND		ug/kg	370	120	2

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-07 D

Date Collected: 12/26/18 12:10

Client ID: RB12_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	370	34.	2
Dimethyl phthalate	ND		ug/kg	370	77.	2
Benzo(a)anthracene	3500		ug/kg	220	41.	2
Benzo(a)pyrene	3600		ug/kg	290	89.	2
Benzo(b)fluoranthene	4000		ug/kg	220	62.	2
Benzo(k)fluoranthene	1400		ug/kg	220	58.	2
Chrysene	3900		ug/kg	220	38.	2
Acenaphthylene	1000		ug/kg	290	56.	2
Anthracene	2200		ug/kg	220	71.	2
Benzo(ghi)perylene	2000		ug/kg	290	43.	2
Fluorene	1500		ug/kg	370	36.	2
Phenanthrene	8700		ug/kg	220	44.	2
Dibenzo(a,h)anthracene	570		ug/kg	220	42.	2
Indeno(1,2,3-cd)pyrene	2100		ug/kg	290	51.	2
Pyrene	7500		ug/kg	220	36.	2
Biphenyl	240	J	ug/kg	830	85.	2
4-Chloroaniline	ND		ug/kg	370	67.	2
2-Nitroaniline	ND		ug/kg	370	70.	2
3-Nitroaniline	ND		ug/kg	370	69.	2
4-Nitroaniline	ND		ug/kg	370	150	2
Dibenzofuran	1000		ug/kg	370	35.	2
2-Methylnaphthalene	650		ug/kg	440	44.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	370	38.	2
Acetophenone	140	J	ug/kg	370	45.	2
2,4,6-Trichlorophenol	ND		ug/kg	220	69.	2
p-Chloro-m-cresol	ND		ug/kg	370	54.	2
2-Chlorophenol	ND		ug/kg	370	43.	2
2,4-Dichlorophenol	ND		ug/kg	330	59.	2
2,4-Dimethylphenol	ND		ug/kg	370	120	2
2-Nitrophenol	ND		ug/kg	790	140	2
4-Nitrophenol	ND		ug/kg	510	150	2
2,4-Dinitrophenol	ND		ug/kg	1800	170	2
4,6-Dinitro-o-cresol	ND		ug/kg	950	180	2
Pentachlorophenol	ND		ug/kg	290	80.	2
Phenol	72	J	ug/kg	370	55.	2
2-Methylphenol	ND		ug/kg	370	57.	2
3-Methylphenol/4-Methylphenol	89	J	ug/kg	530	57.	2

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-07 D

Date Collected: 12/26/18 12:10

Client ID: RB12_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	370	70.	2
Benzoic Acid	ND		ug/kg	1200	370	2
Benzyl Alcohol	ND		ug/kg	370	110	2
Carbazole	930		ug/kg	370	36.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	71		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08 D
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 20:56
 Analyst: ALS
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	280	36.	2
1,2,4-Trichlorobenzene	ND		ug/kg	350	40.	2
Hexachlorobenzene	ND		ug/kg	210	39.	2
Bis(2-chloroethyl)ether	ND		ug/kg	320	48.	2
2-Chloronaphthalene	ND		ug/kg	350	35.	2
1,2-Dichlorobenzene	ND		ug/kg	350	63.	2
1,3-Dichlorobenzene	ND		ug/kg	350	60.	2
1,4-Dichlorobenzene	ND		ug/kg	350	61.	2
3,3'-Dichlorobenzidine	ND		ug/kg	350	93.	2
2,4-Dinitrotoluene	ND		ug/kg	350	70.	2
2,6-Dinitrotoluene	ND		ug/kg	350	60.	2
Fluoranthene	640		ug/kg	210	40.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	350	37.	2
4-Bromophenyl phenyl ether	ND		ug/kg	350	53.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	420	60.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	380	35.	2
Hexachlorobutadiene	ND		ug/kg	350	51.	2
Hexachlorocyclopentadiene	ND		ug/kg	1000	320	2
Hexachloroethane	ND		ug/kg	280	57.	2
Isophorone	ND		ug/kg	320	45.	2
Naphthalene	47	J	ug/kg	350	43.	2
Nitrobenzene	ND		ug/kg	320	52.	2
NDPA/DPA	ND		ug/kg	280	40.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	350	54.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	350	120	2
Butyl benzyl phthalate	ND		ug/kg	350	88.	2
Di-n-butylphthalate	ND		ug/kg	350	66.	2
Di-n-octylphthalate	ND		ug/kg	350	120	2

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08 D

Date Collected: 12/26/18 13:25

Client ID: RB02_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	350	32.	2
Dimethyl phthalate	ND		ug/kg	350	74.	2
Benzo(a)anthracene	460		ug/kg	210	39.	2
Benzo(a)pyrene	470		ug/kg	280	86.	2
Benzo(b)fluoranthene	610		ug/kg	210	59.	2
Benzo(k)fluoranthene	180	J	ug/kg	210	56.	2
Chrysene	520		ug/kg	210	36.	2
Acenaphthylene	100	J	ug/kg	280	54.	2
Anthracene	96	J	ug/kg	210	68.	2
Benzo(ghi)perylene	340		ug/kg	280	41.	2
Fluorene	37	J	ug/kg	350	34.	2
Phenanthrene	510		ug/kg	210	43.	2
Dibenzo(a,h)anthracene	87	J	ug/kg	210	40.	2
Indeno(1,2,3-cd)pyrene	320		ug/kg	280	49.	2
Pyrene	700		ug/kg	210	35.	2
Biphenyl	ND		ug/kg	800	81.	2
4-Chloroaniline	ND		ug/kg	350	64.	2
2-Nitroaniline	ND		ug/kg	350	68.	2
3-Nitroaniline	ND		ug/kg	350	66.	2
4-Nitroaniline	ND		ug/kg	350	140	2
Dibenzofuran	ND		ug/kg	350	33.	2
2-Methylnaphthalene	ND		ug/kg	420	42.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	350	36.	2
Acetophenone	ND		ug/kg	350	43.	2
2,4,6-Trichlorophenol	ND		ug/kg	210	66.	2
p-Chloro-m-cresol	ND		ug/kg	350	52.	2
2-Chlorophenol	ND		ug/kg	350	41.	2
2,4-Dichlorophenol	ND		ug/kg	320	56.	2
2,4-Dimethylphenol	ND		ug/kg	350	120	2
2-Nitrophenol	ND		ug/kg	760	130	2
4-Nitrophenol	ND		ug/kg	490	140	2
2,4-Dinitrophenol	ND		ug/kg	1700	160	2
4,6-Dinitro-o-cresol	ND		ug/kg	910	170	2
Pentachlorophenol	ND		ug/kg	280	77.	2
Phenol	ND		ug/kg	350	53.	2
2-Methylphenol	ND		ug/kg	350	54.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	500	55.	2

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08 D
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	350	67.	2
Benzoic Acid	ND		ug/kg	1100	350	2
Benzyl Alcohol	ND		ug/kg	350	110	2
Carbazole	ND		ug/kg	350	34.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	61		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	62		10-136
4-Terphenyl-d14	59		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 21:23
 Analyst: ALS
 Percent Solids: 70%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	120	J	ug/kg	370	48.	2
1,2,4-Trichlorobenzene	ND		ug/kg	470	53.	2
Hexachlorobenzene	ND		ug/kg	280	52.	2
Bis(2-chloroethyl)ether	ND		ug/kg	420	63.	2
2-Chloronaphthalene	ND		ug/kg	470	46.	2
1,2-Dichlorobenzene	ND		ug/kg	470	84.	2
1,3-Dichlorobenzene	ND		ug/kg	470	80.	2
1,4-Dichlorobenzene	ND		ug/kg	470	82.	2
3,3'-Dichlorobenzidine	ND		ug/kg	470	120	2
2,4-Dinitrotoluene	ND		ug/kg	470	94.	2
2,6-Dinitrotoluene	ND		ug/kg	470	80.	2
Fluoranthene	1100		ug/kg	280	54.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	470	50.	2
4-Bromophenyl phenyl ether	ND		ug/kg	470	71.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	560	80.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	500	47.	2
Hexachlorobutadiene	ND		ug/kg	470	68.	2
Hexachlorocyclopentadiene	ND		ug/kg	1300	420	2
Hexachloroethane	ND		ug/kg	370	76.	2
Isophorone	ND		ug/kg	420	61.	2
Naphthalene	1500		ug/kg	470	57.	2
Nitrobenzene	ND		ug/kg	420	69.	2
NDPA/DPA	ND		ug/kg	370	53.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	470	72.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	470	160	2
Butyl benzyl phthalate	ND		ug/kg	470	120	2
Di-n-butylphthalate	ND		ug/kg	470	89.	2
Di-n-octylphthalate	ND		ug/kg	470	160	2

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D

Date Collected: 12/26/18 13:30

Client ID: RB02_7-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	470	43.	2
Dimethyl phthalate	ND		ug/kg	470	98.	2
Benzo(a)anthracene	820		ug/kg	280	53.	2
Benzo(a)pyrene	3100		ug/kg	370	110	2
Benzo(b)fluoranthene	2700		ug/kg	280	79.	2
Benzo(k)fluoranthene	520		ug/kg	280	75.	2
Chrysene	1000		ug/kg	280	49.	2
Acenaphthylene	2800		ug/kg	370	72.	2
Anthracene	570		ug/kg	280	91.	2
Benzo(ghi)perylene	5400		ug/kg	370	55.	2
Fluorene	360	J	ug/kg	470	45.	2
Phenanthrene	1100		ug/kg	280	57.	2
Dibenzo(a,h)anthracene	540		ug/kg	280	54.	2
Indeno(1,2,3-cd)pyrene	2600		ug/kg	370	65.	2
Pyrene	1800		ug/kg	280	46.	2
Biphenyl	210	J	ug/kg	1100	110	2
4-Chloroaniline	ND		ug/kg	470	85.	2
2-Nitroaniline	ND		ug/kg	470	90.	2
3-Nitroaniline	ND		ug/kg	470	88.	2
4-Nitroaniline	ND		ug/kg	470	190	2
Dibenzofuran	ND		ug/kg	470	44.	2
2-Methylnaphthalene	450	J	ug/kg	560	56.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	470	49.	2
Acetophenone	180	J	ug/kg	470	58.	2
2,4,6-Trichlorophenol	ND		ug/kg	280	89.	2
p-Chloro-m-cresol	ND		ug/kg	470	70.	2
2-Chlorophenol	ND		ug/kg	470	55.	2
2,4-Dichlorophenol	ND		ug/kg	420	75.	2
2,4-Dimethylphenol	ND		ug/kg	470	150	2
2-Nitrophenol	ND		ug/kg	1000	180	2
4-Nitrophenol	ND		ug/kg	650	190	2
2,4-Dinitrophenol	ND		ug/kg	2200	220	2
4,6-Dinitro-o-cresol	ND		ug/kg	1200	220	2
Pentachlorophenol	ND		ug/kg	370	100	2
Phenol	ND		ug/kg	470	70.	2
2-Methylphenol	ND		ug/kg	470	72.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	670	73.	2

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	470	90.	2
Benzoic Acid	ND		ug/kg	1500	470	2
Benzyl Alcohol	ND		ug/kg	470	140	2
Carbazole	ND		ug/kg	470	45.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	64		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10 D
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/01/19 00:00
 Analyst: ALS
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	250	J	ug/kg	1400	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	200	10
Hexachlorobenzene	ND		ug/kg	1100	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	240	10
2-Chloronaphthalene	ND		ug/kg	1800	180	10
1,2-Dichlorobenzene	ND		ug/kg	1800	320	10
1,3-Dichlorobenzene	ND		ug/kg	1800	310	10
1,4-Dichlorobenzene	ND		ug/kg	1800	310	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	480	10
2,4-Dinitrotoluene	ND		ug/kg	1800	360	10
2,6-Dinitrotoluene	ND		ug/kg	1800	310	10
Fluoranthene	4400		ug/kg	1100	200	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	190	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	270	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2100	300	10
Bis(2-chloroethoxy)methane	ND		ug/kg	1900	180	10
Hexachlorobutadiene	ND		ug/kg	1800	260	10
Hexachlorocyclopentadiene	ND		ug/kg	5100	1600	10
Hexachloroethane	ND		ug/kg	1400	290	10
Isophorone	ND		ug/kg	1600	230	10
Naphthalene	360	J	ug/kg	1800	220	10
Nitrobenzene	ND		ug/kg	1600	260	10
NDPA/DPA	ND		ug/kg	1400	200	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	280	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	620	10
Butyl benzyl phthalate	ND		ug/kg	1800	450	10
Di-n-butylphthalate	ND		ug/kg	1800	340	10
Di-n-octylphthalate	ND		ug/kg	1800	610	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-10 D

Date Collected: 12/26/18 13:35

Client ID: RB02_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	160	10
Dimethyl phthalate	ND		ug/kg	1800	380	10
Benzo(a)anthracene	2400		ug/kg	1100	200	10
Benzo(a)pyrene	2500		ug/kg	1400	440	10
Benzo(b)fluoranthene	2800		ug/kg	1100	300	10
Benzo(k)fluoranthene	1000	J	ug/kg	1100	290	10
Chrysene	2100		ug/kg	1100	190	10
Acenaphthylene	290	J	ug/kg	1400	280	10
Anthracene	940	J	ug/kg	1100	350	10
Benzo(ghi)perylene	1500		ug/kg	1400	210	10
Fluorene	270	J	ug/kg	1800	170	10
Phenanthrene	3200		ug/kg	1100	220	10
Dibenzo(a,h)anthracene	340	J	ug/kg	1100	210	10
Indeno(1,2,3-cd)pyrene	1600		ug/kg	1400	250	10
Pyrene	4100		ug/kg	1100	180	10
Biphenyl	ND		ug/kg	4100	420	10
4-Chloroaniline	ND		ug/kg	1800	320	10
2-Nitroaniline	ND		ug/kg	1800	340	10
3-Nitroaniline	ND		ug/kg	1800	340	10
4-Nitroaniline	ND		ug/kg	1800	740	10
Dibenzofuran	220	J	ug/kg	1800	170	10
2-Methylnaphthalene	ND		ug/kg	2100	220	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	190	10
Acetophenone	ND		ug/kg	1800	220	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	340	10
p-Chloro-m-cresol	ND		ug/kg	1800	270	10
2-Chlorophenol	ND		ug/kg	1800	210	10
2,4-Dichlorophenol	ND		ug/kg	1600	290	10
2,4-Dimethylphenol	ND		ug/kg	1800	590	10
2-Nitrophenol	ND		ug/kg	3900	670	10
4-Nitrophenol	ND		ug/kg	2500	730	10
2,4-Dinitrophenol	ND		ug/kg	8600	830	10
4,6-Dinitro-o-cresol	ND		ug/kg	4600	860	10
Pentachlorophenol	ND		ug/kg	1400	390	10
Phenol	ND		ug/kg	1800	270	10
2-Methylphenol	ND		ug/kg	1800	280	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2600	280	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10 D
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	340	10
Benzoic Acid	ND		ug/kg	5800	1800	10
Benzyl Alcohol	ND		ug/kg	1800	550	10
Carbazole	260	J	ug/kg	1800	170	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		25-120
Phenol-d6	51		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	42		10-136
4-Terphenyl-d14	50		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 18:45
 Analyst: ALS
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	700		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	3100		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	1100		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11

Date Collected: 12/26/18 13:40

Client ID: RB02_13-15

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	1900		ug/kg	120	22.	1
Benzo(a)pyrene	1900		ug/kg	160	49.	1
Benzo(b)fluoranthene	2300		ug/kg	120	34.	1
Benzo(k)fluoranthene	630		ug/kg	120	32.	1
Chrysene	1600		ug/kg	120	21.	1
Acenaphthylene	130	J	ug/kg	160	31.	1
Anthracene	730		ug/kg	120	39.	1
Benzo(ghi)perylene	1200		ug/kg	160	23.	1
Fluorene	340		ug/kg	200	19.	1
Phenanthrene	1800		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	250		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	1300		ug/kg	160	28.	1
Pyrene	3600		ug/kg	120	20.	1
Biphenyl	78	J	ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	200		ug/kg	200	19.	1
2-Methylnaphthalene	75	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	960	93.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	96.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	34	J	ug/kg	290	31.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	650	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	200		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	61		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/30/18 22:04
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1193171-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/30/18 22:04
 Analyst: IM

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1193171-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 12/30/18 22:04
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1193171-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	90		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1193171-2 WG1193171-3								
Acenaphthene	57		72		31-137	23		50
1,2,4-Trichlorobenzene	59		81		38-107	31		50
Hexachlorobenzene	72		90		40-140	22		50
Bis(2-chloroethyl)ether	53		72		40-140	30		50
2-Chloronaphthalene	67		86		40-140	25		50
1,2-Dichlorobenzene	55		70		40-140	24		50
1,3-Dichlorobenzene	53		68		40-140	25		50
1,4-Dichlorobenzene	54		69		28-104	24		50
3,3'-Dichlorobenzidine	58		61		40-140	5		50
2,4-Dinitrotoluene	64		81		40-132	23		50
2,6-Dinitrotoluene	74		95		40-140	25		50
Fluoranthene	74		92		40-140	22		50
4-Chlorophenyl phenyl ether	63		78		40-140	21		50
4-Bromophenyl phenyl ether	67		86		40-140	25		50
Bis(2-chloroisopropyl)ether	54		72		40-140	29		50
Bis(2-chloroethoxy)methane	60		79		40-117	27		50
Hexachlorobutadiene	61		81		40-140	28		50
Hexachlorocyclopentadiene	55		78		40-140	35		50
Hexachloroethane	51		66		40-140	26		50
Isophorone	62		81		40-140	27		50
Naphthalene	58		77		40-140	28		50
Nitrobenzene	56		74		40-140	28		50
NDPA/DPA	65		82		36-157	23		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1193171-2 WG1193171-3								
n-Nitrosodi-n-propylamine	60		79		32-121	27		50
Bis(2-ethylhexyl)phthalate	64		81		40-140	23		50
Butyl benzyl phthalate	71		88		40-140	21		50
Di-n-butylphthalate	71		89		40-140	23		50
Di-n-octylphthalate	65		82		40-140	23		50
Diethyl phthalate	62		77		40-140	22		50
Dimethyl phthalate	75		96		40-140	25		50
Benzo(a)anthracene	66		82		40-140	22		50
Benzo(a)pyrene	74		89		40-140	18		50
Benzo(b)fluoranthene	71		87		40-140	20		50
Benzo(k)fluoranthene	75		92		40-140	20		50
Chrysene	68		84		40-140	21		50
Acenaphthylene	72		91		40-140	23		50
Anthracene	71		87		40-140	20		50
Benzo(ghi)perylene	72		88		40-140	20		50
Fluorene	64		80		40-140	22		50
Phenanthrene	68		82		40-140	19		50
Dibenzo(a,h)anthracene	73		88		40-140	19		50
Indeno(1,2,3-cd)pyrene	71		88		40-140	21		50
Pyrene	75		91		35-142	19		50
Biphenyl	69		88		54-104	24		50
4-Chloroaniline	52		58		40-140	11		50
2-Nitroaniline	73		93		47-134	24		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1193171-2 WG1193171-3								
3-Nitroaniline	51		59		26-129	15		50
4-Nitroaniline	58		74		41-125	24		50
Dibenzofuran	61		75		40-140	21		50
2-Methylnaphthalene	63		82		40-140	26		50
1,2,4,5-Tetrachlorobenzene	68		90		40-117	28		50
Acetophenone	59		78		14-144	28		50
2,4,6-Trichlorophenol	77		95		30-130	21		50
p-Chloro-m-cresol	75		95		26-103	24		50
2-Chlorophenol	59		79		25-102	29		50
2,4-Dichlorophenol	70		90		30-130	25		50
2,4-Dimethylphenol	68		90		30-130	28		50
2-Nitrophenol	61		79		30-130	26		50
4-Nitrophenol	59		78		11-114	28		50
2,4-Dinitrophenol	56		76		4-130	30		50
4,6-Dinitro-o-cresol	64		83		10-130	26		50
Pentachlorophenol	67		90		17-109	29		50
Phenol	61		80		26-90	27		50
2-Methylphenol	62		82		30-130.	28		50
3-Methylphenol/4-Methylphenol	64		83		30-130	26		50
2,4,5-Trichlorophenol	77		101		30-130	27		50
Benzoic Acid	32		50		10-110	44		50
Benzyl Alcohol	63		87		40-140	32		50
Carbazole	70		85		54-128	19		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1193171-2 WG1193171-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
2-Fluorophenol	55		73		25-120
Phenol-d6	60		80		10-120
Nitrobenzene-d5	56		74		23-120
2-Fluorobiphenyl	69		88		30-120
2,4,6-Tribromophenol	73		93		10-136
4-Terphenyl-d14	74		92		18-120

PCBS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/30/18 22:30
 Analyst: WR
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.0	3.11	1	A
Aroclor 1221	ND		ug/kg	35.0	3.51	1	A
Aroclor 1232	ND		ug/kg	35.0	7.42	1	A
Aroclor 1242	ND		ug/kg	35.0	4.72	1	A
Aroclor 1248	ND		ug/kg	35.0	5.25	1	A
Aroclor 1254	ND		ug/kg	35.0	3.83	1	A
Aroclor 1260	ND		ug/kg	35.0	6.47	1	A
Aroclor 1262	ND		ug/kg	35.0	4.44	1	A
Aroclor 1268	ND		ug/kg	35.0	3.62	1	A
PCBs, Total	ND		ug/kg	35.0	3.11	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/30/18 22:43
 Analyst: WR
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.2	3.22	1	A
Aroclor 1221	ND		ug/kg	36.2	3.63	1	A
Aroclor 1232	ND		ug/kg	36.2	7.68	1	A
Aroclor 1242	ND		ug/kg	36.2	4.88	1	A
Aroclor 1248	ND		ug/kg	36.2	5.43	1	A
Aroclor 1254	ND		ug/kg	36.2	3.96	1	A
Aroclor 1260	ND		ug/kg	36.2	6.69	1	A
Aroclor 1262	ND		ug/kg	36.2	4.60	1	A
Aroclor 1268	ND		ug/kg	36.2	3.75	1	A
PCBs, Total	ND		ug/kg	36.2	3.22	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/03/19 12:36
 Analyst: WR
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	40.1	3.56	1	A
Aroclor 1221	ND		ug/kg	40.1	4.02	1	A
Aroclor 1232	ND		ug/kg	40.1	8.51	1	A
Aroclor 1242	ND		ug/kg	40.1	5.41	1	A
Aroclor 1248	ND		ug/kg	40.1	6.02	1	A
Aroclor 1254	ND		ug/kg	40.1	4.39	1	A
Aroclor 1260	ND		ug/kg	40.1	7.42	1	A
Aroclor 1262	ND		ug/kg	40.1	5.10	1	A
Aroclor 1268	ND		ug/kg	40.1	4.16	1	A
PCBs, Total	ND		ug/kg	40.1	3.56	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:03
 Analyst: WR
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.0	3.11	1	A
Aroclor 1221	ND		ug/kg	35.0	3.51	1	A
Aroclor 1232	ND		ug/kg	35.0	7.43	1	A
Aroclor 1242	ND		ug/kg	35.0	4.72	1	A
Aroclor 1248	ND		ug/kg	35.0	5.26	1	A
Aroclor 1254	ND		ug/kg	35.0	3.84	1	A
Aroclor 1260	ND		ug/kg	35.0	6.48	1	A
Aroclor 1262	ND		ug/kg	35.0	4.45	1	A
Aroclor 1268	ND		ug/kg	35.0	3.63	1	A
PCBs, Total	ND		ug/kg	35.0	3.11	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	109		30-150	A
Decachlorobiphenyl	99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	117		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:16
 Analyst: WR
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.4	3.14	1	A
Aroclor 1221	ND		ug/kg	35.4	3.55	1	A
Aroclor 1232	ND		ug/kg	35.4	7.51	1	A
Aroclor 1242	ND		ug/kg	35.4	4.77	1	A
Aroclor 1248	ND		ug/kg	35.4	5.31	1	A
Aroclor 1254	ND		ug/kg	35.4	3.87	1	A
Aroclor 1260	22.4	JP	ug/kg	35.4	6.54	1	B
Aroclor 1262	ND		ug/kg	35.4	4.50	1	A
Aroclor 1268	ND		ug/kg	35.4	3.67	1	A
PCBs, Total	22.4	J	ug/kg	35.4	3.14	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:28
 Analyst: HT
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.7	3.17	1	A
Aroclor 1221	ND		ug/kg	35.7	3.58	1	A
Aroclor 1232	ND		ug/kg	35.7	7.57	1	A
Aroclor 1242	ND		ug/kg	35.7	4.81	1	A
Aroclor 1248	ND		ug/kg	35.7	5.35	1	A
Aroclor 1254	ND		ug/kg	35.7	3.90	1	A
Aroclor 1260	ND		ug/kg	35.7	6.60	1	A
Aroclor 1262	ND		ug/kg	35.7	4.53	1	A
Aroclor 1268	ND		ug/kg	35.7	3.70	1	A
PCBs, Total	ND		ug/kg	35.7	3.17	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:41
 Analyst: HT
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.2	3.21	1	A
Aroclor 1221	ND		ug/kg	36.2	3.62	1	A
Aroclor 1232	ND		ug/kg	36.2	7.67	1	A
Aroclor 1242	ND		ug/kg	36.2	4.88	1	A
Aroclor 1248	ND		ug/kg	36.2	5.42	1	A
Aroclor 1254	ND		ug/kg	36.2	3.96	1	A
Aroclor 1260	ND		ug/kg	36.2	6.68	1	A
Aroclor 1262	ND		ug/kg	36.2	4.59	1	A
Aroclor 1268	ND		ug/kg	36.2	3.75	1	A
PCBs, Total	ND		ug/kg	36.2	3.21	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:54
 Analyst: HT
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.6	3.07	1	A
Aroclor 1221	ND		ug/kg	34.6	3.47	1	A
Aroclor 1232	ND		ug/kg	34.6	7.34	1	A
Aroclor 1242	ND		ug/kg	34.6	4.66	1	A
Aroclor 1248	ND		ug/kg	34.6	5.19	1	A
Aroclor 1254	ND		ug/kg	34.6	3.79	1	A
Aroclor 1260	ND		ug/kg	34.6	6.40	1	A
Aroclor 1262	ND		ug/kg	34.6	4.40	1	A
Aroclor 1268	ND		ug/kg	34.6	3.58	1	A
PCBs, Total	ND		ug/kg	34.6	3.07	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 15:07
 Analyst: HT
 Percent Solids: 70%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	46.8	4.16	1	A
Aroclor 1221	ND		ug/kg	46.8	4.69	1	A
Aroclor 1232	ND		ug/kg	46.8	9.93	1	A
Aroclor 1242	ND		ug/kg	46.8	6.31	1	A
Aroclor 1248	ND		ug/kg	46.8	7.02	1	A
Aroclor 1254	ND		ug/kg	46.8	5.12	1	A
Aroclor 1260	ND		ug/kg	46.8	8.65	1	A
Aroclor 1262	ND		ug/kg	46.8	5.95	1	A
Aroclor 1268	ND		ug/kg	46.8	4.85	1	A
PCBs, Total	ND		ug/kg	46.8	4.16	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	100		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 13:50
 Analyst: WR
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	3.23	1	A
Aroclor 1221	ND		ug/kg	36.4	3.65	1	A
Aroclor 1232	ND		ug/kg	36.4	7.72	1	A
Aroclor 1242	ND		ug/kg	36.4	4.91	1	A
Aroclor 1248	ND		ug/kg	36.4	5.46	1	A
Aroclor 1254	6.03	J	ug/kg	36.4	3.98	1	A
Aroclor 1260	12.0	J	ug/kg	36.4	6.73	1	B
Aroclor 1262	ND		ug/kg	36.4	4.62	1	A
Aroclor 1268	ND		ug/kg	36.4	3.77	1	A
PCBs, Total	18.0	J	ug/kg	36.4	3.23	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	108		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 15:20
 Analyst: HT
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.3	3.40	1	A
Aroclor 1221	ND		ug/kg	38.3	3.84	1	A
Aroclor 1232	ND		ug/kg	38.3	8.13	1	A
Aroclor 1242	ND		ug/kg	38.3	5.17	1	A
Aroclor 1248	ND		ug/kg	38.3	5.75	1	A
Aroclor 1254	ND		ug/kg	38.3	4.20	1	A
Aroclor 1260	ND		ug/kg	38.3	7.09	1	A
Aroclor 1262	ND		ug/kg	38.3	4.87	1	A
Aroclor 1268	ND		ug/kg	38.3	3.97	1	A
PCBs, Total	ND		ug/kg	38.3	3.40	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 12/30/18 17:01
Analyst: AWS

Extraction Method: EPA 3546
Extraction Date: 12/27/18 06:08
Cleanup Method: EPA 3665A
Cleanup Date: 12/27/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-11 Batch: WG1192973-1						
Aroclor 1016	ND		ug/kg	32.5	2.88	A
Aroclor 1221	ND		ug/kg	32.5	3.25	A
Aroclor 1232	ND		ug/kg	32.5	6.88	A
Aroclor 1242	ND		ug/kg	32.5	4.38	A
Aroclor 1248	ND		ug/kg	32.5	4.87	A
Aroclor 1254	ND		ug/kg	32.5	3.55	A
Aroclor 1260	ND		ug/kg	32.5	6.00	A
Aroclor 1262	ND		ug/kg	32.5	4.12	A
Aroclor 1268	ND		ug/kg	32.5	3.36	A
PCBs, Total	ND		ug/kg	32.5	2.88	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	71		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1192973-2 WG1192973-3									
Aroclor 1016	75		79		40-140	5		50	A
Aroclor 1260	69		71		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		79		30-150	A
Decachlorobiphenyl	71		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		83		30-150	B
Decachlorobiphenyl	75		76		30-150	B

PESTICIDES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 20:04
 Analyst: SL
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.68	0.330	1	A
Lindane	ND		ug/kg	0.701	0.313	1	A
Alpha-BHC	ND		ug/kg	0.701	0.199	1	A
Beta-BHC	ND		ug/kg	1.68	0.638	1	A
Heptachlor	ND		ug/kg	0.841	0.377	1	A
Aldrin	ND		ug/kg	1.68	0.592	1	A
Heptachlor epoxide	ND		ug/kg	3.16	0.947	1	A
Endrin	ND		ug/kg	0.701	0.287	1	A
Endrin aldehyde	ND		ug/kg	2.10	0.736	1	A
Endrin ketone	ND		ug/kg	1.68	0.433	1	A
Dieldrin	ND		ug/kg	1.05	0.526	1	A
4,4'-DDE	ND		ug/kg	1.68	0.389	1	A
4,4'-DDD	ND		ug/kg	1.68	0.600	1	A
4,4'-DDT	ND		ug/kg	3.16	1.35	1	A
Endosulfan I	ND		ug/kg	1.68	0.398	1	A
Endosulfan II	1.02	JIP	ug/kg	1.68	0.562	1	A
Endosulfan sulfate	ND		ug/kg	0.701	0.334	1	A
Methoxychlor	ND		ug/kg	3.16	0.982	1	A
Toxaphene	ND		ug/kg	31.6	8.84	1	A
cis-Chlordane	ND		ug/kg	2.10	0.586	1	A
trans-Chlordane	0.657	JIP	ug/kg	2.10	0.555	1	A
Chlordane	ND		ug/kg	13.7	5.57	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-01

Date Collected: 12/26/18 09:45

Client ID: RB03_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	87		30-150	B
2,4,5,6-Tetrachloro-m-xylene	103		30-150	A
Decachlorobiphenyl	111		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 22:06
 Analyst: DGM
 Percent Solids: 94%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	175	11.0	1	A
2,4,5-T	ND		ug/kg	175	5.42	1	A
2,4,5-TP (Silvex)	ND		ug/kg	175	4.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	127		30-150	A
DCAA	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 22:44
 Analyst: DGM
 Percent Solids: 90%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.67	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	118		30-150	A
DCAA	84		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02 D
Client ID: RB03_2-3
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 12/30/18 20:17
Analyst: SL
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 12/27/18 13:10
Cleanup Method: EPA 3620B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	17.4	3.40	10	A
Lindane	ND		ug/kg	7.23	3.23	10	A
Alpha-BHC	ND		ug/kg	7.23	2.05	10	A
Beta-BHC	ND		ug/kg	17.4	6.58	10	A
Heptachlor	ND		ug/kg	8.68	3.89	10	A
Aldrin	ND		ug/kg	17.4	6.11	10	A
Heptachlor epoxide	ND		ug/kg	32.6	9.77	10	A
Endrin	ND		ug/kg	7.23	2.97	10	A
Endrin aldehyde	ND		ug/kg	21.7	7.60	10	A
Endrin ketone	ND		ug/kg	17.4	4.47	10	A
Dieldrin	ND		ug/kg	10.8	5.42	10	A
4,4'-DDE	ND		ug/kg	17.4	4.02	10	A
4,4'-DDD	ND		ug/kg	17.4	6.19	10	A
4,4'-DDT	ND		ug/kg	32.6	14.0	10	A
Endosulfan I	ND		ug/kg	17.4	4.10	10	A
Endosulfan II	ND		ug/kg	17.4	5.80	10	A
Endosulfan sulfate	ND		ug/kg	7.23	3.44	10	B
Methoxychlor	ND		ug/kg	32.6	10.1	10	A
Toxaphene	ND		ug/kg	326	91.2	10	A
cis-Chlordane	ND		ug/kg	21.7	6.05	10	A
trans-Chlordane	ND		ug/kg	21.7	5.73	10	A
Chlordane	ND		ug/kg	141	57.5	10	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-02 D

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	33		30-150	B
Decachlorobiphenyl	81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	35		30-150	A
Decachlorobiphenyl	37		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 23:03
 Analyst: DGM
 Percent Solids: 82%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	203	12.8	1	A
2,4,5-T	ND		ug/kg	203	6.30	1	A
2,4,5-TP (Silvex)	ND		ug/kg	203	5.40	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	199	Q	30-150	A
DCAA	130		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03 D
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 20:14
 Analyst: SL
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	94.3	18.5	50	A
Lindane	ND		ug/kg	39.3	17.6	50	A
Alpha-BHC	ND		ug/kg	39.3	11.2	50	A
Beta-BHC	ND		ug/kg	94.3	35.7	50	A
Heptachlor	ND		ug/kg	47.1	21.1	50	A
Aldrin	ND		ug/kg	94.3	33.2	50	A
Heptachlor epoxide	ND		ug/kg	177	53.0	50	A
Endrin	ND		ug/kg	39.3	16.1	50	A
Endrin aldehyde	ND		ug/kg	118	41.2	50	A
Endrin ketone	ND		ug/kg	94.3	24.3	50	A
Dieldrin	ND		ug/kg	58.9	29.5	50	A
4,4'-DDE	ND		ug/kg	94.3	21.8	50	A
4,4'-DDD	ND		ug/kg	94.3	33.6	50	A
4,4'-DDT	ND	IP	ug/kg	177	75.8	50	A
Endosulfan I	ND		ug/kg	94.3	22.3	50	A
Endosulfan II	ND		ug/kg	94.3	31.5	50	A
Endosulfan sulfate	ND		ug/kg	39.3	18.7	50	A
Methoxychlor	ND		ug/kg	177	55.0	50	A
Toxaphene	ND		ug/kg	1770	495.	50	A
cis-Chlordane	ND		ug/kg	118	32.8	50	A
trans-Chlordane	ND		ug/kg	118	31.1	50	A
Chlordane	ND		ug/kg	766	312.	50	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-03 D

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 20:42
 Analyst: SL
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.341	1	A
Lindane	ND		ug/kg	0.726	0.325	1	A
Alpha-BHC	ND		ug/kg	0.726	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.661	1	A
Heptachlor	ND		ug/kg	0.872	0.391	1	A
Aldrin	ND		ug/kg	1.74	0.614	1	A
Heptachlor epoxide	ND		ug/kg	3.27	0.981	1	A
Endrin	ND		ug/kg	0.726	0.298	1	A
Endrin aldehyde	ND		ug/kg	2.18	0.763	1	A
Endrin ketone	ND		ug/kg	1.74	0.449	1	A
Dieldrin	ND		ug/kg	1.09	0.545	1	A
4,4'-DDE	ND		ug/kg	1.74	0.403	1	A
4,4'-DDD	ND		ug/kg	1.74	0.622	1	A
4,4'-DDT	ND		ug/kg	3.27	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.412	1	A
Endosulfan II	6.87	IP	ug/kg	1.74	0.583	1	A
Endosulfan sulfate	ND		ug/kg	0.726	0.346	1	A
Methoxychlor	ND		ug/kg	3.27	1.02	1	A
Toxaphene	ND		ug/kg	32.7	9.15	1	A
cis-Chlordane	ND		ug/kg	2.18	0.607	1	A
trans-Chlordane	0.956	JIP	ug/kg	2.18	0.575	1	A
Chlordane	ND		ug/kg	14.2	5.78	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-04

Date Collected: 12/26/18 11:55

Client ID: RB12_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	99		30-150	B
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	121		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 23:22
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.67	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	110		30-150	A
DCAA	94		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 23:41
 Analyst: DGM
 Percent Solids: 93%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	177	11.2	1	A
2,4,5-T	ND		ug/kg	177	5.50	1	A
2,4,5-TP (Silvex)	ND		ug/kg	177	4.72	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	97		30-150	A
DCAA	94		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 20:27
 Analyst: SL
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	34.3	6.72	20	A
Lindane	ND		ug/kg	14.3	6.40	20	A
Alpha-BHC	ND		ug/kg	14.3	4.06	20	A
Beta-BHC	ND		ug/kg	34.3	13.0	20	A
Heptachlor	ND		ug/kg	17.2	7.70	20	A
Aldrin	ND		ug/kg	34.3	12.1	20	A
Heptachlor epoxide	ND		ug/kg	64.4	19.3	20	A
Endrin	ND		ug/kg	14.3	5.86	20	A
Endrin aldehyde	ND		ug/kg	42.9	15.0	20	A
Endrin ketone	ND		ug/kg	34.3	8.84	20	A
Dieldrin	16.9	J	ug/kg	21.5	10.7	20	B
4,4'-DDE	ND		ug/kg	34.3	7.94	20	A
4,4'-DDD	ND		ug/kg	34.3	12.2	20	A
4,4'-DDT	ND		ug/kg	64.4	27.6	20	A
Endosulfan I	ND		ug/kg	34.3	8.11	20	A
Endosulfan II	ND		ug/kg	34.3	11.5	20	A
Endosulfan sulfate	ND		ug/kg	14.3	6.81	20	A
Methoxychlor	ND		ug/kg	64.4	20.0	20	A
Toxaphene	ND		ug/kg	644	180.	20	A
cis-Chlordane	ND		ug/kg	42.9	12.0	20	A
trans-Chlordane	ND		ug/kg	42.9	11.3	20	A
Chlordane	ND		ug/kg	279	114.	20	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-05 D

Date Collected: 12/26/18 12:00

Client ID: RB12_8-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
Client ID: RB12_9-10
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 12/30/18 21:08
Analyst: SL
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 12/27/18 13:10
Cleanup Method: EPA 3620B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.340	1	A
Lindane	ND		ug/kg	0.724	0.324	1	A
Alpha-BHC	ND		ug/kg	0.724	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.659	1	A
Heptachlor	ND		ug/kg	0.869	0.390	1	A
Aldrin	ND		ug/kg	1.74	0.612	1	A
Heptachlor epoxide	ND	IP	ug/kg	3.26	0.978	1	B
Endrin	1.60	P	ug/kg	0.724	0.297	1	A
Endrin aldehyde	ND		ug/kg	2.17	0.760	1	A
Endrin ketone	ND		ug/kg	1.74	0.448	1	A
Dieldrin	ND		ug/kg	1.09	0.543	1	A
4,4'-DDE	ND		ug/kg	1.74	0.402	1	A
4,4'-DDD	ND		ug/kg	1.74	0.620	1	A
4,4'-DDT	ND		ug/kg	3.26	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.411	1	A
Endosulfan II	ND		ug/kg	1.74	0.581	1	A
Endosulfan sulfate	ND		ug/kg	0.724	0.345	1	A
Methoxychlor	ND		ug/kg	3.26	1.01	1	A
Toxaphene	ND		ug/kg	32.6	9.12	1	A
cis-Chlordane	ND		ug/kg	2.17	0.605	1	A
trans-Chlordane	0.748	JIP	ug/kg	2.17	0.574	1	A
Chlordane	ND		ug/kg	14.1	5.76	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-06

Date Collected: 12/26/18 12:05

Client ID: RB12_9-10

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	108		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	99		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 00:00
 Analyst: DGM
 Percent Solids: 88%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.71	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.90	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	125		30-150	A
DCAA	93		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 21:20
 Analyst: SL
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.75	0.342	1	A
Lindane	ND		ug/kg	0.729	0.326	1	A
Alpha-BHC	ND		ug/kg	0.729	0.207	1	A
Beta-BHC	ND		ug/kg	1.75	0.663	1	A
Heptachlor	ND		ug/kg	0.874	0.392	1	A
Aldrin	ND		ug/kg	1.75	0.616	1	A
Heptachlor epoxide	ND		ug/kg	3.28	0.984	1	A
Endrin	ND		ug/kg	0.729	0.299	1	A
Endrin aldehyde	ND		ug/kg	2.19	0.765	1	A
Endrin ketone	ND		ug/kg	1.75	0.450	1	A
Dieldrin	ND		ug/kg	1.09	0.546	1	A
4,4'-DDE	ND		ug/kg	1.75	0.404	1	A
4,4'-DDD	ND		ug/kg	1.75	0.624	1	A
4,4'-DDT	ND		ug/kg	3.28	1.41	1	A
Endosulfan I	ND		ug/kg	1.75	0.413	1	A
Endosulfan II	ND		ug/kg	1.75	0.584	1	A
Endosulfan sulfate	ND		ug/kg	0.729	0.347	1	A
Methoxychlor	ND		ug/kg	3.28	1.02	1	A
Toxaphene	ND		ug/kg	32.8	9.18	1	A
cis-Chlordane	ND		ug/kg	2.19	0.609	1	A
trans-Chlordane	ND		ug/kg	2.19	0.577	1	A
Chlordane	ND		ug/kg	14.2	5.79	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-07

Date Collected: 12/26/18 12:10

Client ID: RB12_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	98		30-150	B
2,4,5,6-Tetrachloro-m-xylene	322	Q	30-150	A
Decachlorobiphenyl	109		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 00:18
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	180	11.3	1	A
2,4,5-T	ND		ug/kg	180	5.57	1	A
2,4,5-TP (Silvex)	ND		ug/kg	180	4.78	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	119		30-150	A
DCAA	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 21:33
 Analyst: SL
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.65	0.324	1	A
Lindane	ND		ug/kg	0.689	0.308	1	A
Alpha-BHC	ND		ug/kg	0.689	0.196	1	A
Beta-BHC	ND		ug/kg	1.65	0.627	1	A
Heptachlor	ND		ug/kg	0.826	0.370	1	A
Aldrin	ND		ug/kg	1.65	0.582	1	A
Heptachlor epoxide	ND		ug/kg	3.10	0.930	1	A
Endrin	ND		ug/kg	0.689	0.282	1	A
Endrin aldehyde	ND		ug/kg	2.07	0.723	1	A
Endrin ketone	ND		ug/kg	1.65	0.426	1	A
Dieldrin	ND		ug/kg	1.03	0.516	1	A
4,4'-DDE	ND		ug/kg	1.65	0.382	1	A
4,4'-DDD	ND		ug/kg	1.65	0.590	1	A
4,4'-DDT	ND		ug/kg	3.10	1.33	1	A
Endosulfan I	ND		ug/kg	1.65	0.390	1	A
Endosulfan II	ND		ug/kg	1.65	0.552	1	A
Endosulfan sulfate	ND		ug/kg	0.689	0.328	1	A
Methoxychlor	ND		ug/kg	3.10	0.964	1	A
Toxaphene	ND		ug/kg	31.0	8.68	1	A
cis-Chlordane	ND		ug/kg	2.07	0.576	1	A
trans-Chlordane	ND		ug/kg	2.07	0.545	1	A
Chlordane	ND		ug/kg	13.4	5.47	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-08

Date Collected: 12/26/18 13:25

Client ID: RB02_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	79		30-150	B
2,4,5,6-Tetrachloro-m-xylene	117		30-150	A
Decachlorobiphenyl	87		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 00:37
 Analyst: DGM
 Percent Solids: 94%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	176	11.1	1	A
2,4,5-T	ND		ug/kg	176	5.46	1	A
2,4,5-TP (Silvex)	ND		ug/kg	176	4.69	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	96		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 20:40
 Analyst: SL
 Percent Solids: 70%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	10.9	2.14	5	A
Lindane	ND		ug/kg	4.56	2.04	5	A
Alpha-BHC	ND		ug/kg	4.56	1.29	5	A
Beta-BHC	ND		ug/kg	10.9	4.15	5	A
Heptachlor	ND		ug/kg	5.47	2.45	5	A
Aldrin	ND		ug/kg	10.9	3.85	5	A
Heptachlor epoxide	ND		ug/kg	20.5	6.15	5	A
Endrin	ND		ug/kg	4.56	1.87	5	A
Endrin aldehyde	ND		ug/kg	13.7	4.78	5	A
Endrin ketone	ND		ug/kg	10.9	2.82	5	A
Dieldrin	ND		ug/kg	6.84	3.42	5	A
4,4'-DDE	ND		ug/kg	10.9	2.53	5	A
4,4'-DDD	ND		ug/kg	10.9	3.90	5	A
4,4'-DDT	ND		ug/kg	20.5	8.79	5	A
Endosulfan I	ND		ug/kg	10.9	2.58	5	A
Endosulfan II	ND		ug/kg	10.9	3.65	5	A
Endosulfan sulfate	ND		ug/kg	4.56	2.17	5	A
Methoxychlor	ND		ug/kg	20.5	6.38	5	A
Toxaphene	ND		ug/kg	205	57.4	5	A
cis-Chlordane	ND		ug/kg	13.7	3.81	5	A
trans-Chlordane	ND		ug/kg	13.7	3.61	5	A
Chlordane	ND		ug/kg	88.9	36.2	5	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-09 D

Date Collected: 12/26/18 13:30

Client ID: RB02_7-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	100		30-150	B
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	132		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/03/19 13:50
 Analyst: DGM
 Percent Solids: 70%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	4720	297.	20	B
2,4,5-T	ND		ug/kg	4720	146.	20	B
2,4,5-TP (Silvex)	ND		ug/kg	4720	125.	20	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	0	Q	30-150	A
DCAA	0	Q	30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 10:57
 Analyst: BM
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.72	0.337	1	A
Lindane	ND		ug/kg	0.716	0.320	1	A
Alpha-BHC	ND		ug/kg	0.716	0.203	1	A
Beta-BHC	ND		ug/kg	1.72	0.652	1	A
Heptachlor	ND		ug/kg	0.860	0.385	1	A
Aldrin	ND		ug/kg	1.72	0.605	1	A
Heptachlor epoxide	ND		ug/kg	3.22	0.967	1	A
Endrin	ND		ug/kg	0.716	0.294	1	A
Endrin aldehyde	ND		ug/kg	2.15	0.752	1	A
Endrin ketone	ND		ug/kg	1.72	0.443	1	A
Dieldrin	ND		ug/kg	1.07	0.537	1	A
4,4'-DDE	ND		ug/kg	1.72	0.398	1	A
4,4'-DDD	ND		ug/kg	1.72	0.613	1	A
4,4'-DDT	ND		ug/kg	3.22	1.38	1	A
Endosulfan I	ND		ug/kg	1.72	0.406	1	A
Endosulfan II	2.05	IP	ug/kg	1.72	0.575	1	A
Endosulfan sulfate	ND		ug/kg	0.716	0.341	1	A
Methoxychlor	ND		ug/kg	3.22	1.00	1	A
Toxaphene	ND		ug/kg	32.2	9.03	1	A
cis-Chlordane	ND		ug/kg	2.15	0.599	1	A
trans-Chlordane	ND		ug/kg	2.15	0.567	1	A
Chlordane	ND		ug/kg	14.0	5.70	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-10

Date Collected: 12/26/18 13:35

Client ID: RB02_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	93		30-150	B
2,4,5,6-Tetrachloro-m-xylene	254	Q	30-150	A
Decachlorobiphenyl	113		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 01:15
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	180	11.3	1	A
2,4,5-T	ND		ug/kg	180	5.57	1	A
2,4,5-TP (Silvex)	ND		ug/kg	180	4.78	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	98		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 11:10
 Analyst: BM
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.85	0.362	1	A
Lindane	ND		ug/kg	0.769	0.344	1	A
Alpha-BHC	ND		ug/kg	0.769	0.218	1	A
Beta-BHC	ND		ug/kg	1.85	0.700	1	A
Heptachlor	ND		ug/kg	0.923	0.414	1	A
Aldrin	ND		ug/kg	1.85	0.650	1	A
Heptachlor epoxide	ND		ug/kg	3.46	1.04	1	A
Endrin	ND		ug/kg	0.769	0.315	1	A
Endrin aldehyde	ND		ug/kg	2.31	0.808	1	A
Endrin ketone	ND		ug/kg	1.85	0.475	1	A
Dieldrin	ND		ug/kg	1.15	0.577	1	A
4,4'-DDE	ND		ug/kg	1.85	0.427	1	A
4,4'-DDD	ND		ug/kg	1.85	0.658	1	A
4,4'-DDT	ND		ug/kg	3.46	1.48	1	A
Endosulfan I	ND		ug/kg	1.85	0.436	1	A
Endosulfan II	ND		ug/kg	1.85	0.617	1	A
Endosulfan sulfate	ND		ug/kg	0.769	0.366	1	A
Methoxychlor	ND		ug/kg	3.46	1.08	1	A
Toxaphene	ND		ug/kg	34.6	9.69	1	A
cis-Chlordane	ND		ug/kg	2.31	0.643	1	A
trans-Chlordane	ND		ug/kg	2.31	0.609	1	A
Chlordane	ND		ug/kg	15.0	6.12	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-11

Date Collected: 12/26/18 13:40

Client ID: RB02_13-15

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	3520	Q	30-150	A
Decachlorobiphenyl	68		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 01:34
 Analyst: DGM
 Percent Solids: 82%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	202	12.7	1	A
2,4,5-T	ND		ug/kg	202	6.26	1	A
2,4,5-TP (Silvex)	ND		ug/kg	202	5.37	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	135		30-150	A
DCAA	100		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/28/18 11:37
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 12/27/18 13:10
Cleanup Method: EPA 3620B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-11 Batch: WG1193145-1						
Delta-BHC	ND		ug/kg	1.58	0.310	A
Lindane	ND		ug/kg	0.659	0.295	A
Alpha-BHC	ND		ug/kg	0.659	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.600	A
Heptachlor	ND		ug/kg	0.791	0.355	A
Aldrin	ND		ug/kg	1.58	0.557	A
Heptachlor epoxide	ND		ug/kg	2.97	0.890	A
Endrin	ND		ug/kg	0.659	0.270	A
Endrin aldehyde	ND		ug/kg	1.98	0.692	A
Endrin ketone	ND		ug/kg	1.58	0.407	A
Dieldrin	ND		ug/kg	0.989	0.494	A
4,4'-DDE	ND		ug/kg	1.58	0.366	A
4,4'-DDD	ND		ug/kg	1.58	0.564	A
4,4'-DDT	ND		ug/kg	2.97	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.374	A
Endosulfan II	ND		ug/kg	1.58	0.529	A
Endosulfan sulfate	ND		ug/kg	0.659	0.314	A
Methoxychlor	ND		ug/kg	2.97	0.923	A
Toxaphene	ND		ug/kg	29.7	8.30	A
cis-Chlordane	ND		ug/kg	1.98	0.551	A
trans-Chlordane	ND		ug/kg	1.98	0.522	A
Chlordane	ND		ug/kg	12.8	5.24	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/28/18 11:37
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 12/27/18 13:10
Cleanup Method: EPA 3620B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-11 Batch: WG1193145-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	111		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 12/31/18 06:23
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:06

Methylation Date: 12/28/18 08:43

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-11 Batch: WG1193211-1						
2,4-D	ND		ug/kg	164	10.3	A
2,4,5-T	ND		ug/kg	164	5.07	A
2,4,5-TP (Silvex)	ND		ug/kg	164	4.35	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	89		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1193145-2 WG1193145-3									
Delta-BHC	100		108		30-150	8		30	A
Lindane	99		106		30-150	7		30	A
Alpha-BHC	107		106		30-150	1		30	A
Beta-BHC	88		95		30-150	8		30	A
Heptachlor	96		105		30-150	9		30	A
Aldrin	92		102		30-150	10		30	A
Heptachlor epoxide	103		114		30-150	10		30	A
Endrin	106		115		30-150	8		30	A
Endrin aldehyde	86		93		30-150	8		30	A
Endrin ketone	120		121		30-150	1		30	A
Dieldrin	111		121		30-150	9		30	A
4,4'-DDE	92		98		30-150	6		30	A
4,4'-DDD	103		116		30-150	12		30	A
4,4'-DDT	101		117		30-150	15		30	A
Endosulfan I	91		98		30-150	7		30	A
Endosulfan II	103		113		30-150	9		30	A
Endosulfan sulfate	98		97		30-150	1		30	A
Methoxychlor	104		107		30-150	3		30	A
cis-Chlordane	68		73		30-150	7		30	A
trans-Chlordane	76		70		30-150	8		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1193145-2 WG1193145-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	83		87		30-150	B
Decachlorobiphenyl	88		91		30-150	B
2,4,5,6-Tetrachloro-m-xylene	89		92		30-150	A
Decachlorobiphenyl	114		116		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1193211-2 WG1193211-3									
2,4-D	116		131		30-150	12		30	A
2,4,5-T	95		94		30-150	1		30	A
2,4,5-TP (Silvex)	82		82		30-150	0		30	A

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria	Column
DCAA	97		100		30-150	A
DCAA	100		106		30-150	B

METALS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01

Date Collected: 12/26/18 09:45

Client ID: RB03_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5000		mg/kg	8.11	2.19	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Antimony, Total	8.09		mg/kg	4.05	0.308	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Arsenic, Total	17.2		mg/kg	0.811	0.169	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Barium, Total	178		mg/kg	0.811	0.141	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Beryllium, Total	0.260	J	mg/kg	0.405	0.027	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Cadmium, Total	7.40		mg/kg	0.811	0.080	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Calcium, Total	16300		mg/kg	8.11	2.84	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Chromium, Total	18.0		mg/kg	0.811	0.078	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Cobalt, Total	7.62		mg/kg	1.62	0.135	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Copper, Total	270		mg/kg	0.811	0.209	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Iron, Total	34000		mg/kg	4.05	0.732	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Lead, Total	621		mg/kg	4.05	0.217	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Magnesium, Total	2650		mg/kg	8.11	1.25	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Manganese, Total	229		mg/kg	0.811	0.129	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Mercury, Total	1.32		mg/kg	0.067	0.014	1	12/28/18 06:00	01/03/19 21:02	EPA 7471B	1,7471B	EA
Nickel, Total	19.2		mg/kg	2.03	0.196	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Potassium, Total	888		mg/kg	203	11.7	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Selenium, Total	2.40		mg/kg	1.62	0.209	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Silver, Total	35.7		mg/kg	0.811	0.230	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Sodium, Total	322		mg/kg	162	2.55	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.62	0.255	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Vanadium, Total	23.4		mg/kg	0.811	0.165	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Zinc, Total	3040		mg/kg	40.5	2.38	20	12/27/18 20:00	01/03/19 03:58	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	18	J	mg/kg	0.85	0.85	1		01/03/19 01:02	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3840		mg/kg	8.73	2.36	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Antimony, Total	1.88	J	mg/kg	4.36	0.332	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Arsenic, Total	7.86		mg/kg	0.873	0.182	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Barium, Total	137		mg/kg	0.873	0.152	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Beryllium, Total	0.384	J	mg/kg	0.436	0.029	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.873	0.086	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Calcium, Total	19400		mg/kg	8.73	3.06	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Chromium, Total	7.80		mg/kg	0.873	0.084	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Cobalt, Total	5.49		mg/kg	1.75	0.145	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Copper, Total	150		mg/kg	0.873	0.225	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Iron, Total	10800		mg/kg	4.36	0.788	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Lead, Total	108		mg/kg	4.36	0.234	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Magnesium, Total	5700		mg/kg	8.73	1.34	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Manganese, Total	63.2		mg/kg	0.873	0.139	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Mercury, Total	1.83		mg/kg	0.070	0.015	1	12/28/18 06:00	01/03/19 21:04	EPA 7471B	1,7471B	EA
Nickel, Total	25.6		mg/kg	2.18	0.211	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Potassium, Total	440		mg/kg	218	12.6	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Selenium, Total	0.864	J	mg/kg	1.75	0.225	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Silver, Total	9.66		mg/kg	0.873	0.247	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Sodium, Total	260		mg/kg	175	2.75	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.75	0.275	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Vanadium, Total	17.4		mg/kg	0.873	0.177	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Zinc, Total	277		mg/kg	4.36	0.256	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.8		mg/kg	0.89	0.89	1		01/03/19 01:06	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5830		mg/kg	9.52	2.57	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Antimony, Total	0.790	J	mg/kg	4.76	0.362	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Arsenic, Total	2.94		mg/kg	0.952	0.198	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Barium, Total	56.9		mg/kg	0.952	0.166	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Beryllium, Total	0.190	J	mg/kg	0.476	0.031	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.952	0.093	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Calcium, Total	4160		mg/kg	9.52	3.33	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Chromium, Total	13.9		mg/kg	0.952	0.091	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Cobalt, Total	7.86		mg/kg	1.90	0.158	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Copper, Total	126		mg/kg	0.952	0.246	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Iron, Total	16200		mg/kg	4.76	0.859	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Lead, Total	51.8		mg/kg	4.76	0.255	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Magnesium, Total	2660		mg/kg	9.52	1.46	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Manganese, Total	112		mg/kg	0.952	0.151	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Mercury, Total	0.226		mg/kg	0.077	0.016	1	12/28/18 06:00	01/03/19 21:06	EPA 7471B	1,7471B	EA
Nickel, Total	14.9		mg/kg	2.38	0.230	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Potassium, Total	2060		mg/kg	238	13.7	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Selenium, Total	0.523	J	mg/kg	1.90	0.246	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Silver, Total	0.580	J	mg/kg	0.952	0.269	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Sodium, Total	197		mg/kg	190	3.00	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.90	0.300	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Vanadium, Total	21.6		mg/kg	0.952	0.193	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Zinc, Total	430		mg/kg	4.76	0.279	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	0.98	0.98	1		01/03/19 01:10	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-04

Date Collected: 12/26/18 11:55

Client ID: RB12_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3080		mg/kg	8.67	2.34	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Antimony, Total	0.988	J	mg/kg	4.33	0.329	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Arsenic, Total	6.86		mg/kg	0.867	0.180	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Barium, Total	92.6		mg/kg	0.867	0.151	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Beryllium, Total	0.269	J	mg/kg	0.433	0.029	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.867	0.085	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Calcium, Total	28600		mg/kg	8.67	3.03	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Chromium, Total	7.26		mg/kg	0.867	0.083	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Cobalt, Total	5.44		mg/kg	1.73	0.144	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Copper, Total	56.0		mg/kg	0.867	0.224	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Iron, Total	7630		mg/kg	4.33	0.782	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Lead, Total	162		mg/kg	4.33	0.232	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Magnesium, Total	1240		mg/kg	8.67	1.33	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Manganese, Total	72.8		mg/kg	0.867	0.138	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Mercury, Total	0.446		mg/kg	0.069	0.015	1	12/28/18 06:00	01/03/19 21:08	EPA 7471B	1,7471B	EA
Nickel, Total	18.9		mg/kg	2.17	0.210	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Potassium, Total	1260		mg/kg	217	12.5	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Selenium, Total	0.373	J	mg/kg	1.73	0.224	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Silver, Total	0.303	J	mg/kg	0.867	0.245	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Sodium, Total	643		mg/kg	173	2.73	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.73	0.273	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Vanadium, Total	17.7		mg/kg	0.867	0.176	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Zinc, Total	95.8		mg/kg	4.33	0.254	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.3		mg/kg	0.88	0.88	1		01/03/19 01:15	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05

Date Collected: 12/26/18 12:00

Client ID: RB12_8-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8460		mg/kg	8.36	2.26	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.18	0.318	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Arsenic, Total	1.47		mg/kg	0.836	0.174	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Barium, Total	73.8		mg/kg	0.836	0.146	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Beryllium, Total	0.410	J	mg/kg	0.418	0.028	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.836	0.082	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Calcium, Total	11700		mg/kg	8.36	2.93	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Chromium, Total	18.7		mg/kg	0.836	0.080	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Cobalt, Total	11.7		mg/kg	1.67	0.139	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Copper, Total	24.2		mg/kg	0.836	0.216	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Iron, Total	18200		mg/kg	4.18	0.755	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Lead, Total	27.3		mg/kg	4.18	0.224	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Magnesium, Total	3040		mg/kg	8.36	1.29	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Manganese, Total	248		mg/kg	0.836	0.133	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Mercury, Total	0.161		mg/kg	0.068	0.014	1	12/28/18 06:00	01/03/19 21:10	EPA 7471B	1,7471B	EA
Nickel, Total	17.4		mg/kg	2.09	0.202	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Potassium, Total	3130		mg/kg	209	12.0	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.67	0.216	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.836	0.237	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Sodium, Total	55.5	J	mg/kg	167	2.63	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.67	0.263	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Vanadium, Total	26.4		mg/kg	0.836	0.170	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Zinc, Total	52.8		mg/kg	4.18	0.245	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	19		mg/kg	0.86	0.86	1		01/03/19 01:19	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06

Date Collected: 12/26/18 12:05

Client ID: RB12_9-10

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8610		mg/kg	9.03	2.44	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.52	0.343	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Arsenic, Total	1.97		mg/kg	0.903	0.188	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Barium, Total	129		mg/kg	0.903	0.157	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Beryllium, Total	0.244	J	mg/kg	0.452	0.030	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.903	0.089	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Calcium, Total	4200		mg/kg	9.03	3.16	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Chromium, Total	19.8		mg/kg	0.903	0.087	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Cobalt, Total	13.4		mg/kg	1.81	0.150	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Copper, Total	42.3		mg/kg	0.903	0.233	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Iron, Total	17800		mg/kg	4.52	0.816	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Lead, Total	280		mg/kg	4.52	0.242	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Magnesium, Total	5290		mg/kg	9.03	1.39	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Manganese, Total	149		mg/kg	0.903	0.144	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Mercury, Total	0.220		mg/kg	0.072	0.015	1	12/28/18 06:00	01/03/19 21:12	EPA 7471B	1,7471B	EA
Nickel, Total	26.8		mg/kg	2.26	0.219	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Potassium, Total	6230		mg/kg	226	13.0	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Selenium, Total	0.596	J	mg/kg	1.81	0.233	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.903	0.256	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Sodium, Total	150	J	mg/kg	181	2.84	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.81	0.284	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Vanadium, Total	25.8		mg/kg	0.903	0.183	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Zinc, Total	76.0		mg/kg	4.52	0.265	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	20		mg/kg	0.91	0.91	1		01/03/19 01:56	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07

Date Collected: 12/26/18 12:10

Client ID: RB12_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5040		mg/kg	8.47	2.29	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Antimony, Total	1.05	J	mg/kg	4.24	0.322	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Arsenic, Total	7.58		mg/kg	0.847	0.176	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Barium, Total	56.8		mg/kg	0.847	0.147	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Beryllium, Total	0.220	J	mg/kg	0.424	0.028	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.847	0.083	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Calcium, Total	22700		mg/kg	8.47	2.97	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Chromium, Total	11.0		mg/kg	0.847	0.081	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Cobalt, Total	5.78		mg/kg	1.69	0.141	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Copper, Total	52.4		mg/kg	0.847	0.219	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Iron, Total	9100		mg/kg	4.24	0.765	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Lead, Total	126		mg/kg	4.24	0.227	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Magnesium, Total	2260		mg/kg	8.47	1.30	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Manganese, Total	148		mg/kg	0.847	0.135	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Mercury, Total	0.725		mg/kg	0.070	0.015	1	12/28/18 06:00	01/03/19 21:18	EPA 7471B	1,7471B	EA
Nickel, Total	14.1		mg/kg	2.12	0.205	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Potassium, Total	1470		mg/kg	212	12.2	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Selenium, Total	0.492	J	mg/kg	1.69	0.219	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Silver, Total	0.830	J	mg/kg	0.847	0.240	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Sodium, Total	187		mg/kg	169	2.67	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.69	0.267	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Vanadium, Total	17.0		mg/kg	0.847	0.172	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Zinc, Total	69.2		mg/kg	4.24	0.248	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.88	0.88	1		01/03/19 02:00	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08

Date Collected: 12/26/18 13:25

Client ID: RB02_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2920		mg/kg	8.01	2.16	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.00	0.304	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Arsenic, Total	10.3		mg/kg	0.801	0.167	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Barium, Total	53.4		mg/kg	0.801	0.139	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Beryllium, Total	0.112	J	mg/kg	0.400	0.026	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.801	0.079	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Calcium, Total	48200		mg/kg	8.01	2.80	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Chromium, Total	7.26		mg/kg	0.801	0.077	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Cobalt, Total	3.20		mg/kg	1.60	0.133	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Copper, Total	8.00		mg/kg	0.801	0.207	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Iron, Total	6460		mg/kg	4.00	0.723	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Lead, Total	80.8		mg/kg	4.00	0.215	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Magnesium, Total	5460		mg/kg	8.01	1.23	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Manganese, Total	93.2		mg/kg	0.801	0.127	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Mercury, Total	0.076		mg/kg	0.067	0.014	1	12/28/18 06:00	01/03/19 21:20	EPA 7471B	1,7471B	EA
Nickel, Total	6.16		mg/kg	2.00	0.194	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Potassium, Total	1060		mg/kg	200	11.5	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Selenium, Total	0.489	J	mg/kg	1.60	0.207	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.801	0.227	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Sodium, Total	238		mg/kg	160	2.52	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.60	0.252	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Vanadium, Total	9.12		mg/kg	0.801	0.163	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Zinc, Total	39.7		mg/kg	4.00	0.235	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.3		mg/kg	0.86	0.86	1		01/03/19 02:05	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09

Date Collected: 12/26/18 13:30

Client ID: RB02_7-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 70%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3560		mg/kg	11.0	2.96	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	5.49	0.417	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Arsenic, Total	6.20		mg/kg	1.10	0.228	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Barium, Total	52.8		mg/kg	1.10	0.191	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Beryllium, Total	0.209	J	mg/kg	0.549	0.036	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	1.10	0.108	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Calcium, Total	293000		mg/kg	110	38.4	20	12/27/18 20:00	01/03/19 03:50	EPA 3050B	1,6010D	AB
Chromium, Total	5.00		mg/kg	1.10	0.105	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Cobalt, Total	2.81		mg/kg	2.20	0.182	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Copper, Total	35.5		mg/kg	1.10	0.283	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Iron, Total	4600		mg/kg	5.49	0.992	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Lead, Total	95.4		mg/kg	5.49	0.294	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Magnesium, Total	716		mg/kg	11.0	1.69	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Manganese, Total	75.2		mg/kg	1.10	0.175	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.090	0.019	1	12/28/18 06:00	01/03/19 21:22	EPA 7471B	1,7471B	EA
Nickel, Total	6.91		mg/kg	2.74	0.266	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Potassium, Total	429		mg/kg	274	15.8	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Selenium, Total	0.516	J	mg/kg	2.20	0.283	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	1.10	0.311	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Sodium, Total	1090		mg/kg	220	3.46	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	2.20	0.346	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Vanadium, Total	6.37		mg/kg	1.10	0.223	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Zinc, Total	82.7		mg/kg	5.49	0.322	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	5.0		mg/kg	1.1	1.1	1		01/03/19 02:09	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-10

Date Collected: 12/26/18 13:35

Client ID: RB02_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4560		mg/kg	8.35	2.25	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Antimony, Total	0.359	J	mg/kg	4.17	0.317	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Arsenic, Total	2.58		mg/kg	0.835	0.174	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Barium, Total	75.8		mg/kg	0.835	0.145	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Beryllium, Total	0.217	J	mg/kg	0.417	0.028	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.835	0.082	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Calcium, Total	15900		mg/kg	8.35	2.92	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Chromium, Total	11.5		mg/kg	0.835	0.080	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Cobalt, Total	5.31		mg/kg	1.67	0.138	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Copper, Total	23.9		mg/kg	0.835	0.215	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Iron, Total	8740		mg/kg	4.17	0.754	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Lead, Total	198		mg/kg	4.17	0.224	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Magnesium, Total	2750		mg/kg	8.35	1.28	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Manganese, Total	124		mg/kg	0.835	0.133	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Mercury, Total	0.768		mg/kg	0.069	0.015	1	12/28/18 06:00	01/03/19 21:24	EPA 7471B	1,7471B	EA
Nickel, Total	12.6		mg/kg	2.09	0.202	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Potassium, Total	1090		mg/kg	209	12.0	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Selenium, Total	0.676	J	mg/kg	1.67	0.215	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.835	0.236	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Sodium, Total	192		mg/kg	167	2.63	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.67	0.263	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Vanadium, Total	13.7		mg/kg	0.835	0.169	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Zinc, Total	95.7		mg/kg	4.17	0.244	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.88	0.88	1		01/03/19 02:13	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11

Date Collected: 12/26/18 13:40

Client ID: RB02_13-15

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6650		mg/kg	9.76	2.63	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Antimony, Total	0.410	J	mg/kg	4.88	0.371	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Arsenic, Total	4.21		mg/kg	0.976	0.203	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Barium, Total	74.0		mg/kg	0.976	0.170	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Beryllium, Total	0.400	J	mg/kg	0.488	0.032	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.976	0.096	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Calcium, Total	7550		mg/kg	9.76	3.41	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Chromium, Total	15.7		mg/kg	0.976	0.094	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Cobalt, Total	8.05		mg/kg	1.95	0.162	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Copper, Total	19.0		mg/kg	0.976	0.252	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Iron, Total	13700		mg/kg	4.88	0.881	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Lead, Total	388		mg/kg	4.88	0.261	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Magnesium, Total	3560		mg/kg	9.76	1.50	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Manganese, Total	265		mg/kg	0.976	0.155	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Mercury, Total	0.476		mg/kg	0.077	0.016	1	12/28/18 06:00	01/03/19 21:26	EPA 7471B	1,7471B	EA
Nickel, Total	14.3		mg/kg	2.44	0.236	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Potassium, Total	2320		mg/kg	244	14.0	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Selenium, Total	0.488	J	mg/kg	1.95	0.252	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.976	0.276	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Sodium, Total	264		mg/kg	195	3.07	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.95	0.307	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Vanadium, Total	21.6		mg/kg	0.976	0.198	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Zinc, Total	67.8		mg/kg	4.88	0.286	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	16		mg/kg	0.98	0.98	1		01/03/19 02:17	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11 Batch: WG1193234-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Chromium, Total	0.144	J	mg/kg	0.400	0.038	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Iron, Total	1.26	J	mg/kg	2.00	0.361	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Manganese, Total	0.088	J	mg/kg	0.400	0.064	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Potassium, Total	ND		mg/kg	100	5.76	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Sodium, Total	1.42	J	mg/kg	80.0	1.26	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11 Batch: WG1193349-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	12/28/18 06:00	01/03/19 20:33	1,7471B	EA



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1193234-2 SRM Lot Number: D102-540								
Aluminum, Total	59		-		49-150	-		
Antimony, Total	120		-		1-199	-		
Arsenic, Total	92		-		83-117	-		
Barium, Total	86		-		83-118	-		
Beryllium, Total	84		-		83-116	-		
Cadmium, Total	92		-		83-118	-		
Calcium, Total	90		-		82-118	-		
Chromium, Total	83		-		83-117	-		
Cobalt, Total	90		-		84-116	-		
Copper, Total	86		-		84-116	-		
Iron, Total	75		-		61-139	-		
Lead, Total	86		-		82-118	-		
Magnesium, Total	87		-		76-124	-		
Manganese, Total	82		-		82-118	-		
Nickel, Total	88		-		83-117	-		
Potassium, Total	72		-		70-130	-		
Selenium, Total	92		-		79-121	-		
Silver, Total	80		-		80-120	-		
Sodium, Total	83		-		74-126	-		
Thallium, Total	95		-		81-119	-		
Vanadium, Total	83		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853111

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1193234-2 SRM Lot Number: D102-540					
Zinc, Total	87	-	81-118	-	
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1193349-2 SRM Lot Number: D102-540					
Mercury, Total	114	-	65-134	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-3 QC Sample: L1852947-01 Client ID: MS Sample												
Aluminum, Total	8310	182	10300	1090	Q	-	-		75-125	-		20
Antimony, Total	2.75J	45.5	25.4	56	Q	-	-		75-125	-		20
Arsenic, Total	19.5	10.9	32.7	121		-	-		75-125	-		20
Barium, Total	18.4	182	186	92		-	-		75-125	-		20
Beryllium, Total	0.835	4.55	5.00	91		-	-		75-125	-		20
Cadmium, Total	ND	4.64	2.56	55	Q	-	-		75-125	-		20
Calcium, Total	1420	911	2260	92		-	-		75-125	-		20
Chromium, Total	56.8	18.2	79.6	125		-	-		75-125	-		20
Cobalt, Total	4.62	45.5	45.2	89		-	-		75-125	-		20
Copper, Total	10.0	22.8	27.4	76		-	-		75-125	-		20
Iron, Total	53400	91.1	57800	4830	Q	-	-		75-125	-		20
Lead, Total	46.2	46.4	74.9	62	Q	-	-		75-125	-		20
Magnesium, Total	1470	911	2100	69	Q	-	-		75-125	-		20
Manganese, Total	60.4	45.5	96.7	80		-	-		75-125	-		20
Nickel, Total	9.91	45.5	48.8	85		-	-		75-125	-		20
Potassium, Total	2480	911	4520	224	Q	-	-		75-125	-		20
Selenium, Total	0.591J	10.9	10.1	92		-	-		75-125	-		20
Silver, Total	ND	27.3	21.5	79		-	-		75-125	-		20
Sodium, Total	33.9J	911	850	93		-	-		75-125	-		20
Thallium, Total	0.413J	10.9	9.52	87		-	-		75-125	-		20
Vanadium, Total	94.6	45.5	150	122		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-3 QC Sample: L1852947-01 Client ID: MS Sample									
Zinc, Total	169	45.5	147	0	Q	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193349-3 WG1193349-4 QC Sample: L1853088-01 Client ID: MS Sample									
Mercury, Total	13.2	0.148	11.7	0	Q	13.3	68	Q 80-120	13 20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-4 QC Sample: L1852947-01 Client ID: DUP Sample						
Aluminum, Total	8310	8570	mg/kg	3		20
Antimony, Total	2.75J	3.22J	mg/kg	NC		20
Arsenic, Total	19.5	21.6	mg/kg	10		20
Barium, Total	18.4	17.1	mg/kg	7		20
Beryllium, Total	0.835	0.891	mg/kg	6		20
Cadmium, Total	ND	ND	mg/kg	NC		20
Calcium, Total	1420	1330	mg/kg	7		20
Chromium, Total	56.8	59.4	mg/kg	4		20
Cobalt, Total	4.62	4.18	mg/kg	10		20
Copper, Total	10.0	8.96	mg/kg	11		20
Lead, Total	46.2	47.5	mg/kg	3		20
Magnesium, Total	1470	1350	mg/kg	9		20
Manganese, Total	60.4	61.0	mg/kg	1		20
Nickel, Total	9.91	9.44	mg/kg	5		20
Potassium, Total	2480	2490	mg/kg	0		20
Selenium, Total	0.591J	0.836J	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	33.9J	31.0J	mg/kg	NC		20
Thallium, Total	0.413J	0.340J	mg/kg	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-4 QC Sample: L1852947-01 Client ID: DUP Sample					
Vanadium, Total	94.6	95.1	mg/kg	1	20
Zinc, Total	169	224	mg/kg	28	20
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-4 QC Sample: L1852947-01 Client ID: DUP Sample					
Iron, Total	53400	64400	mg/kg	19	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
Client ID: RB03_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/27/18 11:35	12/27/18 15:15	1,9010C/9012B	LH
Chromium, Hexavalent	0.181	J	mg/kg	0.854	0.171	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
Client ID: RB03_2-3
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	0.24	J	mg/kg	1.0	0.22	1	12/27/18 11:35	12/27/18 14:46	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.892	0.178	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	3.0		mg/kg	1.2	0.25	1	12/27/18 11:35	12/27/18 14:47	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.979	0.196	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
Client ID: RB12_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.5		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.22	1	12/27/18 11:35	12/27/18 14:48	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.884	0.177	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05
Client ID: RB12_8-9
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	0.66	J	mg/kg	1.1	0.23	1	12/27/18 11:35	12/27/18 14:49	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.863	0.172	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
Client ID: RB12_9-10
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.0		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.22	1	12/27/18 11:35	12/27/18 14:50	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.909	0.182	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
Client ID: RB12_10-12
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/27/18 11:35	12/27/18 14:51	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.882	0.176	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
Client ID: RB02_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.5		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/27/18 11:35	12/27/18 14:54	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.856	0.171	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09
Client ID: RB02_7-9
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	70.2		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	2.3		mg/kg	1.4	0.29	1	12/27/18 11:35	12/27/18 14:56	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.14	0.228	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
Client ID: RB02_10-12
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.1		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	0.28	J	mg/kg	1.1	0.22	1	12/27/18 11:35	12/27/18 14:57	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.878	0.176	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
Client ID: RB02_13-15
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.8		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	1.1		mg/kg	1.1	0.24	1	12/27/18 11:35	12/27/18 14:58	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.978	0.196	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG1193065-1										
Cyanide, Total	ND		mg/kg	0.84	0.18	1	12/27/18 11:35	12/27/18 14:01	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 07-11 Batch: WG1193067-1										
Cyanide, Total	ND		mg/kg	0.84	0.18	1	12/27/18 11:35	12/27/18 14:02	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG1193257-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1193259-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1193065-2 WG1193065-3								
Cyanide, Total	66	Q	91		80-120	28		35
General Chemistry - Westborough Lab Associated sample(s): 07-11 Batch: WG1193067-2 WG1193067-3								
Cyanide, Total	65	Q	89		80-120	29		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1193257-2								
Chromium, Hexavalent	100		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1193259-2								
Chromium, Hexavalent	100		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1193065-4 WG1193065-5 QC Sample: L1853087-01 Client ID: MS Sample												
Cyanide, Total	ND	12	11	96		10	91		75-125	10		35
General Chemistry - Westborough Lab Associated sample(s): 07-11 QC Batch ID: WG1193067-4 WG1193067-5 QC Sample: L1853134-01 Client ID: MS Sample												
Cyanide, Total	ND	12	11	94		12	100		75-125	9		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1193257-4 QC Sample: L1853111-10 Client ID: RB02_10-12												
Chromium, Hexavalent	ND	1230	1050	85		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193259-4 QC Sample: L1853111-11 Client ID: RB02_13-15												
Chromium, Hexavalent	ND	1500	882	59	Q	-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-11 QC Batch ID: WG1193077-1 QC Sample: L1853032-01 Client ID: DUP Sample						
Solids, Total	80.2	82.9	%	3		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1193257-6 QC Sample: L1853111-10 Client ID: RB02_10-12						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193259-6 QC Sample: L1853111-11 Client ID: RB02_13-15						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Serial_No:01041915:21
Lab Number: L1853111
Report Date: 01/04/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-01A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-01B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-01C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-01D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-01E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-01F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-01G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-02A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-02B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-02C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-02D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-02E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-02F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-02G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-03A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-03B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-03C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-03D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-03E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-03F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-03G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-04A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-04B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-04C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-04D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-04E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-04F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-04G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-05A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-05B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-05C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-05D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-05F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-05G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-06A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-06B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-06C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-06D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-06E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-06F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-06G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-07A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-07B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-07C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-07D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-07E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-07F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-07G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-08A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-08B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-08C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-08D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1853111-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-08F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-08G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-09A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-09B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-09C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-09D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1853111-09E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-09F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-09G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-10A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-10B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-10C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-10D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Serial_No:01041915:21
Lab Number: L1853111
Report Date: 01/04/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-10E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-10F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-10G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-11A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-11B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-11C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-11D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1853111-11E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-11F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-11G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-12A	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L1853111-12B	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522.

Non-Potable Water


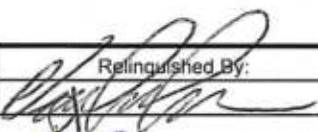
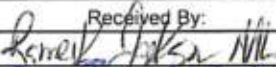
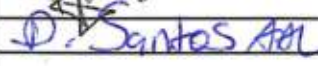
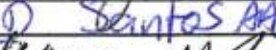
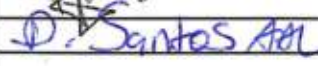
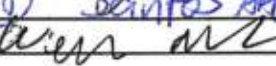
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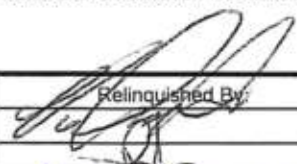
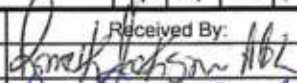


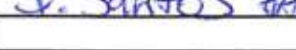
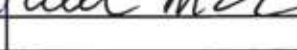
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3268	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #																																																																																																																																																																						
			1 of 2	12/26/18	L1853111																																																																																																																																																																						
Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>			Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #																																																																																																																																																																						
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl, NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com			Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																																																																																																						
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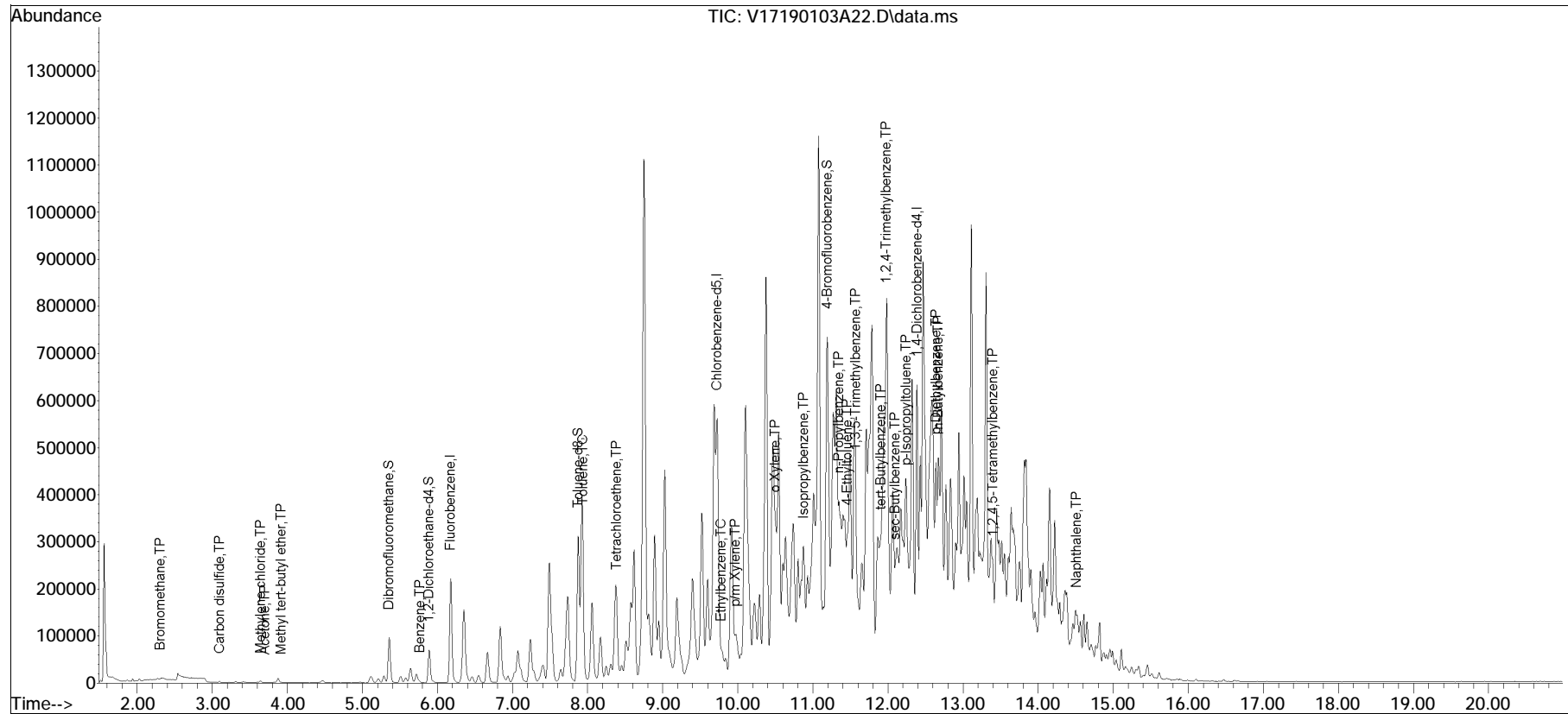
 ALPHA ANALYTICAL <small>ANALYTICAL LABORATORY</small>	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 2 of 2	Date Rec'd in Lab 12/26/18	ALPHA Job # 11853111								
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001	Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other	Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #									
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	-12 SOTBO2-122618	12/26/18 -	AD	-	X								2
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		Relinquished By: 		Date/Time 12/26/18 1522		Received By: 		Date/Time 12/26/18 1522					
		Relinquished By: 		Date/Time 12/26/18 1900		Received By: 		Date/Time 12/26/18 1900					
		Relinquished By: 		Date/Time 12/26/18 2230		Received By: 		Date/Time 12/26/18 2230					

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2019\190103A\
 Data File : V17190103A22.D
 Acq On : 04 Jan 2019 01:32
 Operator : VOA117:MV
 Sample : 11853111-01,31H,5.15,5,0.100,,a
 Misc : WG1194605,ICAL15123
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 04 06:07:57 2019
 Quant Method : I:\VOLATILES\VOA117\2019\190103A\V117_181010N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Oct 12 09:26:09 2018
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90103A\V17190103A02.D•

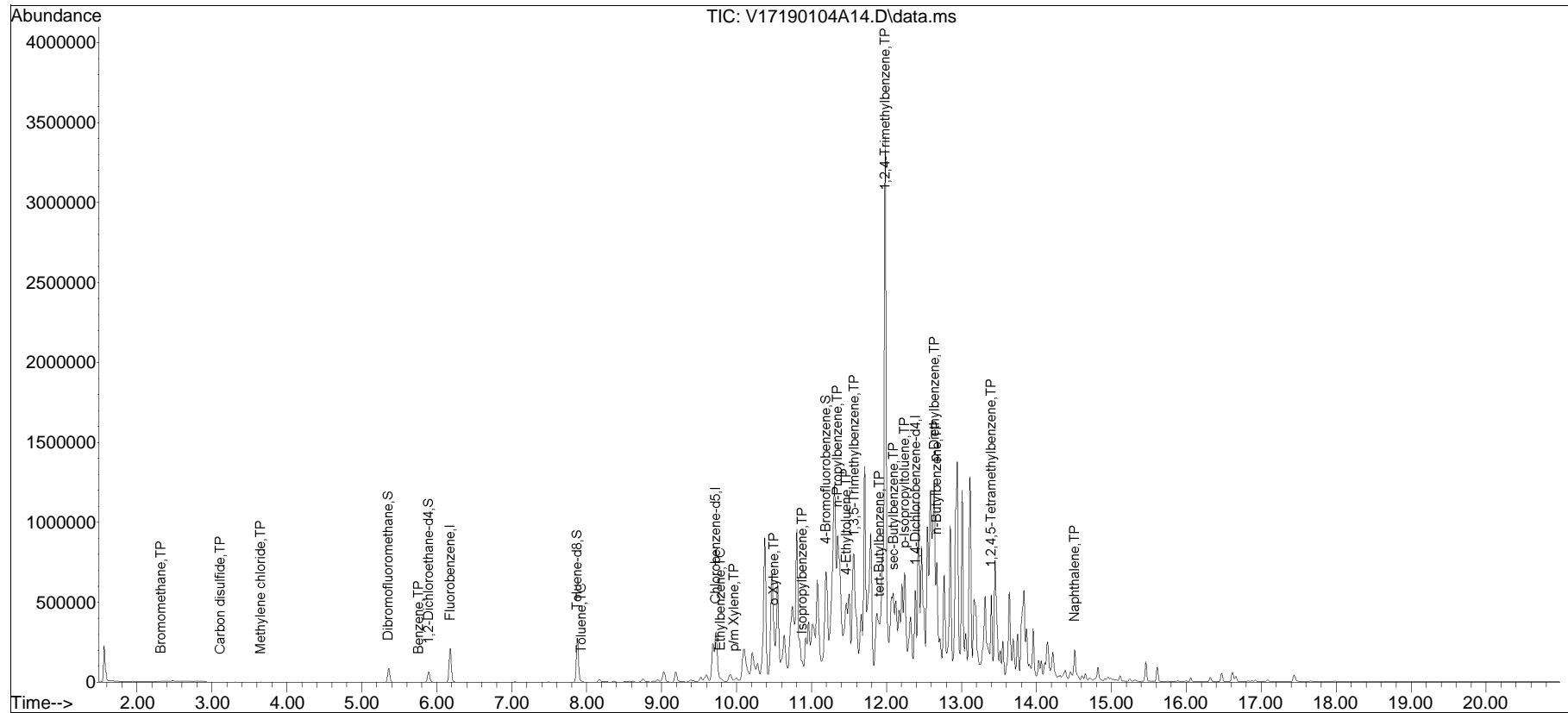


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2019\190104A\
 Data File : V17190104A14.D
 Acq On : 04 Jan 2019 11:50 am
 Operator : VOA117:JC
 Sample : 11853111-05D,31H,4.56,5,0.050,,a
 Misc : WG1194817,ICAL15123
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 04 12:22:44 2019
 Quant Method : I:\VOLATILES\VOA117\2019\190104A\V117_181010N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Oct 12 09:26:09 2018
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90104A\V17190104A01.D•





ANALYTICAL REPORT

Lab Number:	L1853234
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/07/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1853234-01	RB01_0-2	SOIL	BRONX, NY	12/27/18 09:30	12/27/18
L1853234-02	RB01_14-15	SOIL	BRONX, NY	12/27/18 09:40	12/27/18
L1853234-03	RB01_25-27	SOIL	BRONX, NY	12/27/18 09:45	12/27/18
L1853234-04	RB08_0-2	SOIL	BRONX, NY	12/27/18 12:45	12/27/18
L1853234-05	RB08_10-12	SOIL	BRONX, NY	12/27/18 12:50	12/27/18
L1853234-06	RB08_12-14	SOIL	BRONX, NY	12/27/18 12:55	12/27/18
L1853234-07	RB08_14-16	SOIL	BRONX, NY	12/27/18 13:00	12/27/18
L1853234-08	SODUP02_122718	SOIL	BRONX, NY	12/27/18 00:00	12/27/18
L1853234-09	RB01_9-11	SOIL	BRONX, NY	12/27/18 09:35	12/27/18
L1853234-10	SOTB03_122718	WATER	BRONX, NY	12/27/18 00:00	12/27/18
L1853234-11	SOFB02_122718	WATER	BRONX, NY	12/27/18 10:45	12/27/18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Volatile Organics

L1853234-01: The internal standard (IS) response for 1,4-dichlorobenzene-d4 (43%) was below the acceptance criteria; however, re-analysis achieved similar results: 1,4-dichlorobenzene-d4 (39%). The results of both analyses are reported.

L1853234-02: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (146%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.

Semivolatile Organics

L1853234-09: The sample has elevated detection limits due to the dilution required by the sample matrix. The WG1193399-6/-7 MS/MSD recoveries, performed on L1853234-03, are below the acceptance criteria for 2,4-dinitrophenol (0%/0%) and benzoic acid (0%/0%) due to the concentration of these compounds falling below the reported detection limit.

Semivolatile Organics by SIM

L1853234-11 was extracted with the method required holding time exceeded.

The WG1194717-1 Method Blank, associated with L1853234-11, has a concentration above the reporting limit for Naphthalene. Since the sample was non-detect to the RL for this target analyte, no further actions were taken. The results of the original analysis are reported.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Case Narrative (continued)

Pesticides

L1853234-02 and -09: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1853234-02: The surrogate recoveries are outside the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (7680%) and decachlorobiphenyl (242%); however, the sample was not re-extracted due to coelution with obvious interferences.

L1853234-09: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L1853234-01 through -09: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1193639-3/-4 MS/MSD recoveries for aluminum (566%/304%), iron (1510%/836%) and manganese (MSD at 56%), performed on L1853234-03, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1193639-3/-4 MS/MSD recoveries, performed on L1853234-03, are outside the acceptance criteria for calcium (59%/43%), copper (MSD at 71%), lead (68%/64%), potassium (MS at 126%) and zinc (MSD at 72%). A post digestion spike was performed and was within acceptance criteria.

Cyanide, Total

The WG1193512-3 LCSD recovery (73%), associated with L1853234-01 through -09, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Hexavalent Chromium

The WG1193635-4/-5 Insoluble MS/MSD recoveries (14%/3%), performed on L1853234-03, are below the acceptance criteria. The Soluble MS recovery (17%) was also below criteria. This has been attributed to matrix

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Case Narrative (continued)

interference. A post-spike was performed with an acceptable recovery 104%.

The WG1193635-4/-5 MS/MSD RPD (129%), performed on L1853234-03, is above the acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 01/07/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 15:38
 Analyst: AD
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	12	5.3	1
1,1-Dichloroethane	ND		ug/kg	2.3	0.34	1
Chloroform	ND		ug/kg	3.5	0.33	1
Carbon tetrachloride	ND		ug/kg	2.3	0.54	1
1,2-Dichloropropane	ND		ug/kg	2.3	0.29	1
Dibromochloromethane	ND		ug/kg	2.3	0.33	1
1,1,2-Trichloroethane	ND		ug/kg	2.3	0.62	1
Tetrachloroethene	19		ug/kg	1.2	0.46	1
Chlorobenzene	ND		ug/kg	1.2	0.30	1
Trichlorofluoromethane	ND		ug/kg	9.3	1.6	1
1,2-Dichloroethane	ND		ug/kg	2.3	0.60	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.39	1
Bromodichloromethane	ND		ug/kg	1.2	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	2.3	0.64	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.37	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.37	1
1,1-Dichloropropene	ND		ug/kg	1.2	0.37	1
Bromoform	ND		ug/kg	9.3	0.57	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.39	1
Benzene	0.85	J	ug/kg	1.2	0.39	1
Toluene	1.6	J	ug/kg	2.3	1.3	1
Ethylbenzene	0.48	J	ug/kg	2.3	0.33	1
Chloromethane	ND		ug/kg	9.3	2.2	1
Bromomethane	ND		ug/kg	4.6	1.4	1
Vinyl chloride	ND		ug/kg	2.3	0.78	1
Chloroethane	ND		ug/kg	4.6	1.0	1
1,1-Dichloroethene	ND		ug/kg	2.3	0.55	1
trans-1,2-Dichloroethene	ND		ug/kg	3.5	0.32	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-01

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	1.2	0.32	1
1,2-Dichlorobenzene	ND		ug/kg	4.6	0.34	1
1,3-Dichlorobenzene	ND		ug/kg	4.6	0.34	1
1,4-Dichlorobenzene	ND		ug/kg	4.6	0.40	1
Methyl tert butyl ether	ND		ug/kg	4.6	0.47	1
p/m-Xylene	1.5	J	ug/kg	4.6	1.3	1
o-Xylene	ND		ug/kg	2.3	0.68	1
Xylenes, Total	1.5	J	ug/kg	2.3	0.68	1
cis-1,2-Dichloroethene	ND		ug/kg	2.3	0.41	1
1,2-Dichloroethene, Total	ND		ug/kg	2.3	0.32	1
Dibromomethane	ND		ug/kg	4.6	0.55	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	23	2.1	1
Acetone	15	J	ug/kg	23	11.	1
Carbon disulfide	ND		ug/kg	23	10.	1
2-Butanone	ND		ug/kg	23	5.2	1
Vinyl acetate	ND		ug/kg	23	5.0	1
4-Methyl-2-pentanone	ND		ug/kg	23	3.0	1
1,2,3-Trichloropropane	ND		ug/kg	4.6	0.30	1
2-Hexanone	ND		ug/kg	23	2.7	1
Bromochloromethane	ND		ug/kg	4.6	0.48	1
2,2-Dichloropropane	ND		ug/kg	4.6	0.47	1
1,2-Dibromoethane	ND		ug/kg	2.3	0.65	1
1,3-Dichloropropane	ND		ug/kg	4.6	0.39	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.31	1
Bromobenzene	ND		ug/kg	4.6	0.34	1
n-Butylbenzene	ND		ug/kg	2.3	0.39	1
sec-Butylbenzene	ND		ug/kg	2.3	0.34	1
tert-Butylbenzene	ND		ug/kg	4.6	0.27	1
o-Chlorotoluene	ND		ug/kg	4.6	0.44	1
p-Chlorotoluene	ND		ug/kg	4.6	0.25	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	7.0	2.3	1
Hexachlorobutadiene	ND		ug/kg	9.3	0.39	1
Isopropylbenzene	ND		ug/kg	2.3	0.25	1
p-Isopropyltoluene	ND		ug/kg	2.3	0.25	1
Naphthalene	ND		ug/kg	9.3	1.5	1
Acrylonitrile	ND		ug/kg	9.3	2.7	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	2.3	0.40	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.6	0.75	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.6	0.63	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.6	0.45	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.6	0.78	1
1,4-Dioxane	ND		ug/kg	230	82.	1
p-Diethylbenzene	ND		ug/kg	4.6	0.41	1
p-Ethyltoluene	ND		ug/kg	4.6	0.89	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.6	0.44	1
Ethyl ether	ND		ug/kg	4.6	0.79	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	12	3.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	122		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01 R
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 22:16
 Analyst: MV
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.8	3.6	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.23	1
Chloroform	0.50	J	ug/kg	2.3	0.22	1
Carbon tetrachloride	ND		ug/kg	1.6	0.36	1
1,2-Dichloropropane	ND		ug/kg	1.6	0.20	1
Dibromochloromethane	ND		ug/kg	1.6	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.42	1
Tetrachloroethene	42		ug/kg	0.78	0.31	1
Chlorobenzene	ND		ug/kg	0.78	0.20	1
Trichlorofluoromethane	ND		ug/kg	6.3	1.1	1
1,2-Dichloroethane	ND		ug/kg	1.6	0.40	1
1,1,1-Trichloroethane	ND		ug/kg	0.78	0.26	1
Bromodichloromethane	ND		ug/kg	0.78	0.17	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	0.43	1
cis-1,3-Dichloropropene	ND		ug/kg	0.78	0.25	1
1,3-Dichloropropene, Total	ND		ug/kg	0.78	0.25	1
1,1-Dichloropropene	ND		ug/kg	0.78	0.25	1
Bromoform	ND		ug/kg	6.3	0.38	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.78	0.26	1
Benzene	1.2		ug/kg	0.78	0.26	1
Toluene	2.9		ug/kg	1.6	0.85	1
Ethylbenzene	0.94	J	ug/kg	1.6	0.22	1
Chloromethane	ND		ug/kg	6.3	1.4	1
Bromomethane	ND		ug/kg	3.1	0.91	1
Vinyl chloride	ND		ug/kg	1.6	0.52	1
Chloroethane	ND		ug/kg	3.1	0.71	1
1,1-Dichloroethene	ND		ug/kg	1.6	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	2.3	0.21	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-01 R

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.78	0.21	1
1,2-Dichlorobenzene	ND		ug/kg	3.1	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	3.1	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	3.1	0.27	1
Methyl tert butyl ether	ND		ug/kg	3.1	0.31	1
p/m-Xylene	3.2		ug/kg	3.1	0.88	1
o-Xylene	1.1	J	ug/kg	1.6	0.46	1
Xylenes, Total	4.3	J	ug/kg	1.6	0.46	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	0.27	1
1,2-Dichloroethene, Total	ND		ug/kg	1.6	0.21	1
Dibromomethane	ND		ug/kg	3.1	0.37	1
Styrene	ND		ug/kg	1.6	0.31	1
Dichlorodifluoromethane	ND		ug/kg	16	1.4	1
Acetone	14	J	ug/kg	16	7.5	1
Carbon disulfide	ND		ug/kg	16	7.1	1
2-Butanone	ND		ug/kg	16	3.5	1
Vinyl acetate	ND		ug/kg	16	3.4	1
4-Methyl-2-pentanone	ND		ug/kg	16	2.0	1
1,2,3-Trichloropropane	ND		ug/kg	3.1	0.20	1
2-Hexanone	ND		ug/kg	16	1.8	1
Bromochloromethane	ND		ug/kg	3.1	0.32	1
2,2-Dichloropropane	ND		ug/kg	3.1	0.32	1
1,2-Dibromoethane	ND		ug/kg	1.6	0.44	1
1,3-Dichloropropane	ND		ug/kg	3.1	0.26	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.78	0.21	1
Bromobenzene	ND		ug/kg	3.1	0.23	1
n-Butylbenzene	ND		ug/kg	1.6	0.26	1
sec-Butylbenzene	ND		ug/kg	1.6	0.23	1
tert-Butylbenzene	ND		ug/kg	3.1	0.18	1
o-Chlorotoluene	ND		ug/kg	3.1	0.30	1
p-Chlorotoluene	ND		ug/kg	3.1	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	1.6	1
Hexachlorobutadiene	ND		ug/kg	6.3	0.26	1
Isopropylbenzene	ND		ug/kg	1.6	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.6	0.17	1
Naphthalene	2.4	J	ug/kg	6.3	1.0	1
Acrylonitrile	ND		ug/kg	6.3	1.8	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01 R
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.6	0.27	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.1	0.50	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.1	0.42	1
1,3,5-Trimethylbenzene	3.1		ug/kg	3.1	0.30	1
1,2,4-Trimethylbenzene	4.3		ug/kg	3.1	0.52	1
1,4-Dioxane	ND		ug/kg	160	55.	1
p-Diethylbenzene	2.4	J	ug/kg	3.1	0.28	1
p-Ethyltoluene	2.4	J	ug/kg	3.1	0.60	1
1,2,4,5-Tetramethylbenzene	0.48	J	ug/kg	3.1	0.30	1
Ethyl ether	ND		ug/kg	3.1	0.53	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.8	2.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	124		70-130
4-Bromofluorobenzene	121		70-130
Dibromofluoromethane	109		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 14:59
 Analyst: MKS
 Percent Solids: 63%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	700	320	1
1,1-Dichloroethane	ND		ug/kg	140	20.	1
Chloroform	ND		ug/kg	210	20.	1
Carbon tetrachloride	ND		ug/kg	140	32.	1
1,2-Dichloropropane	ND		ug/kg	140	18.	1
Dibromochloromethane	ND		ug/kg	140	20.	1
1,1,2-Trichloroethane	ND		ug/kg	140	38.	1
Tetrachloroethene	ND		ug/kg	70	28.	1
Chlorobenzene	ND		ug/kg	70	18.	1
Trichlorofluoromethane	ND		ug/kg	560	98.	1
1,2-Dichloroethane	ND		ug/kg	140	36.	1
1,1,1-Trichloroethane	ND		ug/kg	70	24.	1
Bromodichloromethane	ND		ug/kg	70	15.	1
trans-1,3-Dichloropropene	ND		ug/kg	140	38.	1
cis-1,3-Dichloropropene	ND		ug/kg	70	22.	1
1,3-Dichloropropene, Total	ND		ug/kg	70	22.	1
1,1-Dichloropropene	ND		ug/kg	70	22.	1
Bromoform	ND		ug/kg	560	35.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	70	23.	1
Benzene	180		ug/kg	70	23.	1
Toluene	170		ug/kg	140	76.	1
Ethylbenzene	80	J	ug/kg	140	20.	1
Chloromethane	ND		ug/kg	560	130	1
Bromomethane	ND		ug/kg	280	82.	1
Vinyl chloride	ND		ug/kg	140	47.	1
Chloroethane	ND		ug/kg	280	64.	1
1,1-Dichloroethene	ND		ug/kg	140	34.	1
trans-1,2-Dichloroethene	ND		ug/kg	210	19.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-02

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	70	19.	1
1,2-Dichlorobenzene	ND		ug/kg	280	20.	1
1,3-Dichlorobenzene	ND		ug/kg	280	21.	1
1,4-Dichlorobenzene	ND		ug/kg	280	24.	1
Methyl tert butyl ether	ND		ug/kg	280	28.	1
p/m-Xylene	140	J	ug/kg	280	79.	1
o-Xylene	50	J	ug/kg	140	41.	1
Xylenes, Total	190	J	ug/kg	140	41.	1
cis-1,2-Dichloroethene	ND		ug/kg	140	25.	1
1,2-Dichloroethene, Total	ND		ug/kg	140	19.	1
Dibromomethane	ND		ug/kg	280	34.	1
Styrene	52	J	ug/kg	140	28.	1
Dichlorodifluoromethane	ND		ug/kg	1400	130	1
Acetone	2200		ug/kg	1400	680	1
Carbon disulfide	ND		ug/kg	1400	640	1
2-Butanone	350	J	ug/kg	1400	310	1
Vinyl acetate	ND		ug/kg	1400	300	1
4-Methyl-2-pentanone	ND		ug/kg	1400	180	1
1,2,3-Trichloropropane	ND		ug/kg	280	18.	1
2-Hexanone	ND		ug/kg	1400	170	1
Bromochloromethane	ND		ug/kg	280	29.	1
2,2-Dichloropropane	ND		ug/kg	280	28.	1
1,2-Dibromoethane	ND		ug/kg	140	39.	1
1,3-Dichloropropane	ND		ug/kg	280	24.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	70	18.	1
Bromobenzene	ND		ug/kg	280	20.	1
n-Butylbenzene	360		ug/kg	140	24.	1
sec-Butylbenzene	1000		ug/kg	140	20.	1
tert-Butylbenzene	ND		ug/kg	280	17.	1
o-Chlorotoluene	ND		ug/kg	280	27.	1
p-Chlorotoluene	ND		ug/kg	280	15.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	420	140	1
Hexachlorobutadiene	ND		ug/kg	560	24.	1
Isopropylbenzene	440		ug/kg	140	15.	1
p-Isopropyltoluene	100	J	ug/kg	140	15.	1
Naphthalene	1400		ug/kg	560	92.	1
Acrylonitrile	ND		ug/kg	560	160	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-02

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	ND		ug/kg	140	24.	1
1,2,3-Trichlorobenzene	ND		ug/kg	280	45.	1
1,2,4-Trichlorobenzene	ND		ug/kg	280	38.	1
1,3,5-Trimethylbenzene	ND		ug/kg	280	27.	1
1,2,4-Trimethylbenzene	67	J	ug/kg	280	47.	1
1,4-Dioxane	ND		ug/kg	14000	4900	1
p-Diethylbenzene	540		ug/kg	280	25.	1
p-Ethyltoluene	1200		ug/kg	280	54.	1
1,2,4,5-Tetramethylbenzene	4400		ug/kg	280	27.	1
Ethyl ether	ND		ug/kg	280	48.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	700	200	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	146	Q	70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 16:03
 Analyst: AD
 Percent Solids: 60%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.6	3.9	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.25	1
Chloroform	ND		ug/kg	2.6	0.24	1
Carbon tetrachloride	ND		ug/kg	1.7	0.40	1
1,2-Dichloropropane	ND		ug/kg	1.7	0.22	1
Dibromochloromethane	ND		ug/kg	1.7	0.24	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.46	1
Tetrachloroethene	ND		ug/kg	0.86	0.34	1
Chlorobenzene	ND		ug/kg	0.86	0.22	1
Trichlorofluoromethane	ND		ug/kg	6.9	1.2	1
1,2-Dichloroethane	ND		ug/kg	1.7	0.44	1
1,1,1-Trichloroethane	ND		ug/kg	0.86	0.29	1
Bromodichloromethane	ND		ug/kg	0.86	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.7	0.47	1
cis-1,3-Dichloropropene	ND		ug/kg	0.86	0.27	1
1,3-Dichloropropene, Total	ND		ug/kg	0.86	0.27	1
1,1-Dichloropropene	ND		ug/kg	0.86	0.27	1
Bromoform	ND		ug/kg	6.9	0.42	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.86	0.28	1
Benzene	ND		ug/kg	0.86	0.28	1
Toluene	ND		ug/kg	1.7	0.93	1
Ethylbenzene	ND		ug/kg	1.7	0.24	1
Chloromethane	ND		ug/kg	6.9	1.6	1
Bromomethane	ND		ug/kg	3.4	1.0	1
Vinyl chloride	ND		ug/kg	1.7	0.58	1
Chloroethane	ND		ug/kg	3.4	0.78	1
1,1-Dichloroethene	ND		ug/kg	1.7	0.41	1
trans-1,2-Dichloroethene	ND		ug/kg	2.6	0.24	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-03

Date Collected: 12/27/18 09:45

Client ID: RB01_25-27

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.86	0.24	1
1,2-Dichlorobenzene	ND		ug/kg	3.4	0.25	1
1,3-Dichlorobenzene	ND		ug/kg	3.4	0.25	1
1,4-Dichlorobenzene	ND		ug/kg	3.4	0.29	1
Methyl tert butyl ether	ND		ug/kg	3.4	0.34	1
p/m-Xylene	ND		ug/kg	3.4	0.96	1
o-Xylene	ND		ug/kg	1.7	0.50	1
Xylenes, Total	ND		ug/kg	1.7	0.50	1
cis-1,2-Dichloroethene	ND		ug/kg	1.7	0.30	1
1,2-Dichloroethene, Total	ND		ug/kg	1.7	0.24	1
Dibromomethane	ND		ug/kg	3.4	0.41	1
Styrene	ND		ug/kg	1.7	0.34	1
Dichlorodifluoromethane	ND		ug/kg	17	1.6	1
Acetone	70		ug/kg	17	8.3	1
Carbon disulfide	15	J	ug/kg	17	7.8	1
2-Butanone	9.4	J	ug/kg	17	3.8	1
Vinyl acetate	ND		ug/kg	17	3.7	1
4-Methyl-2-pentanone	ND		ug/kg	17	2.2	1
1,2,3-Trichloropropane	ND		ug/kg	3.4	0.22	1
2-Hexanone	ND		ug/kg	17	2.0	1
Bromochloromethane	ND		ug/kg	3.4	0.35	1
2,2-Dichloropropane	ND		ug/kg	3.4	0.35	1
1,2-Dibromoethane	ND		ug/kg	1.7	0.48	1
1,3-Dichloropropane	ND		ug/kg	3.4	0.29	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.86	0.23	1
Bromobenzene	ND		ug/kg	3.4	0.25	1
n-Butylbenzene	ND		ug/kg	1.7	0.29	1
sec-Butylbenzene	ND		ug/kg	1.7	0.25	1
tert-Butylbenzene	ND		ug/kg	3.4	0.20	1
o-Chlorotoluene	ND		ug/kg	3.4	0.33	1
p-Chlorotoluene	ND		ug/kg	3.4	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	1.7	1
Hexachlorobutadiene	ND		ug/kg	6.9	0.29	1
Isopropylbenzene	ND		ug/kg	1.7	0.19	1
p-Isopropyltoluene	ND		ug/kg	1.7	0.19	1
Naphthalene	ND		ug/kg	6.9	1.1	1
Acrylonitrile	ND		ug/kg	6.9	2.0	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.7	0.29	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.4	0.55	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.4	0.47	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.4	0.33	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.4	0.57	1
1,4-Dioxane	ND		ug/kg	170	60.	1
p-Diethylbenzene	ND		ug/kg	3.4	0.30	1
p-Ethyltoluene	ND		ug/kg	3.4	0.66	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.4	0.33	1
Ethyl ether	ND		ug/kg	3.4	0.59	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.6	2.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	114		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/05/19 17:29
 Analyst: AD
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	0.41	J	ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.79	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.57	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	ND		ug/kg	1.1	0.62	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.66	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.3	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.57	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.6	0.74	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	110	40.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.7	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 00:07
 Analyst: MV
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	0.25	J	ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.78	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Bromodichloromethane	ND		ug/kg	0.56	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.56	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.56	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.56	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.56	0.19	1
Benzene	0.23	J	ug/kg	0.56	0.19	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.2	0.65	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.2	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.23	1
p/m-Xylene	ND		ug/kg	2.2	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.4	1
Carbon disulfide	ND		ug/kg	11	5.1	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.56	0.15	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.5	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.5	0.73	1
Acrylonitrile	ND		ug/kg	4.5	1.3	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
Client ID: RB08_10-12
Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.38	1
1,4-Dioxane	ND		ug/kg	110	40.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.20	1
p-Ethyltoluene	ND		ug/kg	2.2	0.43	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.38	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.6	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	107		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 15:50
 Analyst: MKS
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.96	0.14	1
Chloroform	0.63	J	ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.96	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.96	0.12	1
Dibromochloromethane	ND		ug/kg	0.96	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.96	0.26	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	0.16	J	ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.96	0.52	1
Ethylbenzene	ND		ug/kg	0.96	0.14	1
Chloromethane	ND		ug/kg	3.8	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.96	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.54	1
o-Xylene	ND		ug/kg	0.96	0.28	1
Xylenes, Total	ND		ug/kg	0.96	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.96	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.96	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.88	1
Acetone	6.6	J	ug/kg	9.6	4.6	1
Carbon disulfide	ND		ug/kg	9.6	4.4	1
2-Butanone	ND		ug/kg	9.6	2.1	1
Vinyl acetate	ND		ug/kg	9.6	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.6	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.96	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.96	0.16	1
sec-Butylbenzene	ND		ug/kg	0.96	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.96	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.96	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.96	0.10	1
Naphthalene	1.1	J	ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
Client ID: RB08_12-14
Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.96	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	96	34.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 16:15
 Analyst: MKS
 Percent Solids: 68%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.1	3.2	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.1	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.33	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.38	1
Tetrachloroethene	ND		ug/kg	0.71	0.28	1
Chlorobenzene	ND		ug/kg	0.71	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.98	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.36	1
1,1,1-Trichloroethane	ND		ug/kg	0.71	0.24	1
Bromodichloromethane	ND		ug/kg	0.71	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.39	1
cis-1,3-Dichloropropene	ND		ug/kg	0.71	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.71	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.71	0.22	1
Bromoform	ND		ug/kg	5.7	0.35	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.71	0.24	1
Benzene	ND		ug/kg	0.71	0.24	1
Toluene	ND		ug/kg	1.4	0.77	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.7	1.3	1
Bromomethane	ND		ug/kg	2.8	0.82	1
Vinyl chloride	ND		ug/kg	1.4	0.48	1
Chloroethane	ND		ug/kg	2.8	0.64	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.19	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-07

Date Collected: 12/27/18 13:00

Client ID: RB08_14-16

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.71	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.28	1
p/m-Xylene	ND		ug/kg	2.8	0.79	1
o-Xylene	ND		ug/kg	1.4	0.41	1
Xylenes, Total	ND		ug/kg	1.4	0.41	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.25	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.8	0.34	1
Styrene	ND		ug/kg	1.4	0.28	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	82		ug/kg	14	6.8	1
Carbon disulfide	ND		ug/kg	14	6.4	1
2-Butanone	14		ug/kg	14	3.1	1
Vinyl acetate	ND		ug/kg	14	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	0.18	1
2-Hexanone	ND		ug/kg	14	1.7	1
Bromochloromethane	ND		ug/kg	2.8	0.29	1
2,2-Dichloropropane	ND		ug/kg	2.8	0.29	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.40	1
1,3-Dichloropropane	ND		ug/kg	2.8	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.71	0.19	1
Bromobenzene	ND		ug/kg	2.8	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.24	1
sec-Butylbenzene	ND		ug/kg	1.4	0.21	1
tert-Butylbenzene	ND		ug/kg	2.8	0.17	1
o-Chlorotoluene	ND		ug/kg	2.8	0.27	1
p-Chlorotoluene	ND		ug/kg	2.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.7	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	0.27	J	ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.7	0.92	1
Acrylonitrile	ND		ug/kg	5.7	1.6	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
Client ID: RB08_14-16
Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.46	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.38	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.27	1
1,2,4-Trimethylbenzene	0.60	J	ug/kg	2.8	0.47	1
1,4-Dioxane	ND		ug/kg	140	50.	1
p-Diethylbenzene	0.32	J	ug/kg	2.8	0.25	1
p-Ethyltoluene	ND		ug/kg	2.8	0.54	1
1,2,4,5-Tetramethylbenzene	0.46	J	ug/kg	2.8	0.27	1
Ethyl ether	ND		ug/kg	2.8	0.48	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.1	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	127		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 14:34
 Analyst: MKS
 Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.2	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.34	1
Tetrachloroethene	ND		ug/kg	0.63	0.25	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.87	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.63	0.21	1
Bromodichloromethane	ND		ug/kg	0.63	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.63	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.0	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.63	0.21	1
Benzene	ND		ug/kg	0.63	0.21	1
Toluene	ND		ug/kg	1.2	0.68	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.73	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.25	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	28		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.7	1
2-Butanone	4.7	J	ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.63	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.82	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
1,4-Dioxane	ND		ug/kg	120	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.43	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.3	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 16:41
 Analyst: MKS
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.1	1.9	1
1,1-Dichloroethane	ND		ug/kg	0.81	0.12	1
Chloroform	ND		ug/kg	1.2	0.11	1
Carbon tetrachloride	ND		ug/kg	0.81	0.19	1
1,2-Dichloropropane	ND		ug/kg	0.81	0.10	1
Dibromochloromethane	ND		ug/kg	0.81	0.11	1
1,1,2-Trichloroethane	ND		ug/kg	0.81	0.22	1
Tetrachloroethene	2.2		ug/kg	0.41	0.16	1
Chlorobenzene	ND		ug/kg	0.41	0.10	1
Trichlorofluoromethane	ND		ug/kg	3.2	0.57	1
1,2-Dichloroethane	ND		ug/kg	0.81	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.41	0.14	1
Bromodichloromethane	ND		ug/kg	0.41	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.81	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	0.41	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	0.41	0.13	1
1,1-Dichloropropene	ND		ug/kg	0.41	0.13	1
Bromoform	ND		ug/kg	3.2	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.41	0.14	1
Benzene	0.32	J	ug/kg	0.41	0.14	1
Toluene	0.46	J	ug/kg	0.81	0.44	1
Ethylbenzene	ND		ug/kg	0.81	0.11	1
Chloromethane	ND		ug/kg	3.2	0.76	1
Bromomethane	ND		ug/kg	1.6	0.47	1
Vinyl chloride	ND		ug/kg	0.81	0.27	1
Chloroethane	ND		ug/kg	1.6	0.37	1
1,1-Dichloroethene	ND		ug/kg	0.81	0.19	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.11	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-09

Date Collected: 12/27/18 09:35

Client ID: RB01_9-11

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.41	0.11	1
1,2-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,4-Dichlorobenzene	ND		ug/kg	1.6	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.6	0.16	1
p/m-Xylene	ND		ug/kg	1.6	0.46	1
o-Xylene	ND		ug/kg	0.81	0.24	1
Xylenes, Total	ND		ug/kg	0.81	0.24	1
cis-1,2-Dichloroethene	ND		ug/kg	0.81	0.14	1
1,2-Dichloroethene, Total	ND		ug/kg	0.81	0.11	1
Dibromomethane	ND		ug/kg	1.6	0.19	1
Styrene	ND		ug/kg	0.81	0.16	1
Dichlorodifluoromethane	ND		ug/kg	8.1	0.74	1
Acetone	ND		ug/kg	8.1	3.9	1
Carbon disulfide	ND		ug/kg	8.1	3.7	1
2-Butanone	ND		ug/kg	8.1	1.8	1
Vinyl acetate	ND		ug/kg	8.1	1.8	1
4-Methyl-2-pentanone	ND		ug/kg	8.1	1.0	1
1,2,3-Trichloropropane	ND		ug/kg	1.6	0.10	1
2-Hexanone	ND		ug/kg	8.1	0.96	1
Bromochloromethane	ND		ug/kg	1.6	0.17	1
2,2-Dichloropropane	ND		ug/kg	1.6	0.16	1
1,2-Dibromoethane	ND		ug/kg	0.81	0.23	1
1,3-Dichloropropane	ND		ug/kg	1.6	0.14	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.41	0.11	1
Bromobenzene	ND		ug/kg	1.6	0.12	1
n-Butylbenzene	ND		ug/kg	0.81	0.14	1
sec-Butylbenzene	ND		ug/kg	0.81	0.12	1
tert-Butylbenzene	ND		ug/kg	1.6	0.10	1
o-Chlorotoluene	ND		ug/kg	1.6	0.16	1
p-Chlorotoluene	ND		ug/kg	1.6	0.09	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.4	0.81	1
Hexachlorobutadiene	ND		ug/kg	3.2	0.14	1
Isopropylbenzene	ND		ug/kg	0.81	0.09	1
p-Isopropyltoluene	ND		ug/kg	0.81	0.09	1
Naphthalene	ND		ug/kg	3.2	0.53	1
Acrylonitrile	ND		ug/kg	3.2	0.94	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09
Client ID: RB01_9-11
Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.81	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.6	0.26	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.6	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.6	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.6	0.27	1
1,4-Dioxane	ND		ug/kg	81	28.	1
p-Diethylbenzene	ND		ug/kg	1.6	0.14	1
p-Ethyltoluene	ND		ug/kg	1.6	0.31	1
1,2,4,5-Tetramethylbenzene	0.21	J	ug/kg	1.6	0.16	1
Ethyl ether	ND		ug/kg	1.6	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.1	1.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-10
 Client ID: SOTB03_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 15:09
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-10
 Client ID: SOTB03_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-10
 Client ID: SOTB03_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 15:45
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-11

Date Collected: 12/27/18 10:45

Client ID: SOFB02_122718

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 08:09
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,03 Batch: WG1194141-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/02/19 08:09
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,03 Batch: WG1194141-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/02/19 08:09
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,03 Batch: WG1194141-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	110		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 19:31
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,05 Batch: WG1194326-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 19:31
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,05 Batch: WG1194326-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/02/19 19:31
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,05 Batch: WG1194326-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	105		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/19 10:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1194582-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 10:18
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1194582-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/03/19 10:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1194582-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/04/19 13:43
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06-09 Batch: WG1195020-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.90	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06-09 Batch: WG1195020-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06-09 Batch: WG1195020-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02 Batch: WG1195021-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	45	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02 Batch: WG1195021-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/04/19 13:43
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02 Batch: WG1195021-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/05/19 09:52
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1195241-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.62	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/05/19 09:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1195241-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/05/19 09:52
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1195241-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	94		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1194141-3 WG1194141-4								
Methylene chloride	94		93		70-130	1		30
1,1-Dichloroethane	96		95		70-130	1		30
Chloroform	103		102		70-130	1		30
Carbon tetrachloride	115		116		70-130	1		30
1,2-Dichloropropane	89		89		70-130	0		30
Dibromochloromethane	96		98		70-130	2		30
1,1,2-Trichloroethane	92		93		70-130	1		30
Tetrachloroethene	110		109		70-130	1		30
Chlorobenzene	96		96		70-130	0		30
Trichlorofluoromethane	134		130		70-139	3		30
1,2-Dichloroethane	92		94		70-130	2		30
1,1,1-Trichloroethane	112		109		70-130	3		30
Bromodichloromethane	98		99		70-130	1		30
trans-1,3-Dichloropropene	95		95		70-130	0		30
cis-1,3-Dichloropropene	96		96		70-130	0		30
1,1-Dichloropropene	112		110		70-130	2		30
Bromoform	96		96		70-130	0		30
1,1,1,2-Tetrachloroethane	83		84		70-130	1		30
Benzene	100		99		70-130	1		30
Toluene	95		96		70-130	1		30
Ethylbenzene	96		97		70-130	1		30
Chloromethane	100		95		52-130	5		30
Bromomethane	103		99		57-147	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1194141-3 WG1194141-4								
Vinyl chloride	108		106		67-130	2		30
Chloroethane	105		104		50-151	1		30
1,1-Dichloroethene	106		105		65-135	1		30
trans-1,2-Dichloroethene	103		101		70-130	2		30
Trichloroethene	103		102		70-130	1		30
1,2-Dichlorobenzene	94		93		70-130	1		30
1,3-Dichlorobenzene	96		96		70-130	0		30
1,4-Dichlorobenzene	95		94		70-130	1		30
Methyl tert butyl ether	96		96		66-130	0		30
p/m-Xylene	99		100		70-130	1		30
o-Xylene	96		96		70-130	0		30
cis-1,2-Dichloroethene	100		98		70-130	2		30
Dibromomethane	98		99		70-130	1		30
Styrene	93		94		70-130	1		30
Dichlorodifluoromethane	92		89		30-146	3		30
Acetone	99		96		54-140	3		30
Carbon disulfide	105		104		59-130	1		30
2-Butanone	83		85		70-130	2		30
Vinyl acetate	103		103		70-130	0		30
4-Methyl-2-pentanone	77		76		70-130	1		30
1,2,3-Trichloropropane	88		88		68-130	0		30
2-Hexanone	70		72		70-130	3		30
Bromochloromethane	107		108		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1194141-3 WG1194141-4								
2,2-Dichloropropane	106		104		70-130	2		30
1,2-Dibromoethane	92		93		70-130	1		30
1,3-Dichloropropane	91		92		69-130	1		30
1,1,1,2-Tetrachloroethane	98		98		70-130	0		30
Bromobenzene	95		94		70-130	1		30
n-Butylbenzene	98		98		70-130	0		30
sec-Butylbenzene	94		94		70-130	0		30
tert-Butylbenzene	98		98		70-130	0		30
o-Chlorotoluene	103		103		70-130	0		30
p-Chlorotoluene	94		94		70-130	0		30
1,2-Dibromo-3-chloropropane	90		90		68-130	0		30
Hexachlorobutadiene	98		99		67-130	1		30
Isopropylbenzene	97		96		70-130	1		30
p-Isopropyltoluene	98		98		70-130	0		30
Naphthalene	87		88		70-130	1		30
Acrylonitrile	86		87		70-130	1		30
n-Propylbenzene	97		97		70-130	0		30
1,2,3-Trichlorobenzene	94		93		70-130	1		30
1,2,4-Trichlorobenzene	93		93		70-130	0		30
1,3,5-Trimethylbenzene	96		97		70-130	1		30
1,2,4-Trimethylbenzene	94		94		70-130	0		30
1,4-Dioxane	110		114		65-136	4		30
p-Diethylbenzene	92		93		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1194141-3 WG1194141-4								
p-Ethyltoluene	92		92		70-130	0		30
1,2,4,5-Tetramethylbenzene	88		87		70-130	1		30
Ethyl ether	98		98		67-130	0		30
trans-1,4-Dichloro-2-butene	81		83		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	100		102		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	96		94		70-130
Dibromofluoromethane	108		110		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 Batch: WG1194326-3 WG1194326-4								
Methylene chloride	82		79		70-130	4		30
1,1-Dichloroethane	94		90		70-130	4		30
Chloroform	91		89		70-130	2		30
Carbon tetrachloride	92		91		70-130	1		30
1,2-Dichloropropane	92		90		70-130	2		30
Dibromochloromethane	88		90		70-130	2		30
1,1,2-Trichloroethane	96		94		70-130	2		30
Tetrachloroethene	99		96		70-130	3		30
Chlorobenzene	93		92		70-130	1		30
Trichlorofluoromethane	74		72		70-139	3		30
1,2-Dichloroethane	91		93		70-130	2		30
1,1,1-Trichloroethane	96		93		70-130	3		30
Bromodichloromethane	90		91		70-130	1		30
trans-1,3-Dichloropropene	91		92		70-130	1		30
cis-1,3-Dichloropropene	87		86		70-130	1		30
1,1-Dichloropropene	107		102		70-130	5		30
Bromoform	85		90		70-130	6		30
1,1,2,2-Tetrachloroethane	92		93		70-130	1		30
Benzene	94		91		70-130	3		30
Toluene	99		97		70-130	2		30
Ethylbenzene	103		101		70-130	2		30
Chloromethane	91		82		52-130	10		30
Bromomethane	64		61		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 Batch: WG1194326-3 WG1194326-4								
Vinyl chloride	83		80		67-130	4		30
Chloroethane	72		67		50-151	7		30
1,1-Dichloroethene	83		82		65-135	1		30
trans-1,2-Dichloroethene	86		84		70-130	2		30
Trichloroethene	93		91		70-130	2		30
1,2-Dichlorobenzene	94		94		70-130	0		30
1,3-Dichlorobenzene	96		95		70-130	1		30
1,4-Dichlorobenzene	94		93		70-130	1		30
Methyl tert butyl ether	89		88		66-130	1		30
p/m-Xylene	103		101		70-130	2		30
o-Xylene	102		101		70-130	1		30
cis-1,2-Dichloroethene	89		87		70-130	2		30
Dibromomethane	89		88		70-130	1		30
Styrene	93		92		70-130	1		30
Dichlorodifluoromethane	59		56		30-146	5		30
Acetone	109		105		54-140	4		30
Carbon disulfide	84		80		59-130	5		30
2-Butanone	91		90		70-130	1		30
Vinyl acetate	106		105		70-130	1		30
4-Methyl-2-pentanone	90		92		70-130	2		30
1,2,3-Trichloropropane	94		96		68-130	2		30
2-Hexanone	93		94		70-130	1		30
Bromochloromethane	87		85		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 Batch: WG1194326-3 WG1194326-4								
2,2-Dichloropropane	98		96		70-130	2		30
1,2-Dibromoethane	93		94		70-130	1		30
1,3-Dichloropropane	97		97		69-130	0		30
1,1,1,2-Tetrachloroethane	93		94		70-130	1		30
Bromobenzene	91		91		70-130	0		30
n-Butylbenzene	108		106		70-130	2		30
sec-Butylbenzene	103		101		70-130	2		30
tert-Butylbenzene	106		104		70-130	2		30
o-Chlorotoluene	103		100		70-130	3		30
p-Chlorotoluene	104		103		70-130	1		30
1,2-Dibromo-3-chloropropane	84		86		68-130	2		30
Hexachlorobutadiene	93		93		67-130	0		30
Isopropylbenzene	108		105		70-130	3		30
p-Isopropyltoluene	108		107		70-130	1		30
Naphthalene	88		92		70-130	4		30
Acrylonitrile	86		88		70-130	2		30
n-Propylbenzene	105		104		70-130	1		30
1,2,3-Trichlorobenzene	89		92		70-130	3		30
1,2,4-Trichlorobenzene	93		94		70-130	1		30
1,3,5-Trimethylbenzene	106		103		70-130	3		30
1,2,4-Trimethylbenzene	108		106		70-130	2		30
1,4-Dioxane	106		109		65-136	3		30
p-Diethylbenzene	104		103		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 Batch: WG1194326-3 WG1194326-4								
p-Ethyltoluene	102		100		70-130	2		30
1,2,4,5-Tetramethylbenzene	95		95		70-130	0		30
Ethyl ether	69		65	Q	67-130	6		30
trans-1,4-Dichloro-2-butene	90		92		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	111		110		70-130
Toluene-d8	107		107		70-130
4-Bromofluorobenzene	108		108		70-130
Dibromofluoromethane	100		100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1194582-3 WG1194582-4								
Methylene chloride	99		98		70-130	1		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	99		100		70-130	1		20
Carbon tetrachloride	90		88		63-132	2		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	96		95		63-130	1		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	86		85		70-130	1		20
Chlorobenzene	98		99		75-130	1		20
Trichlorofluoromethane	92		90		62-150	2		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	91		89		67-130	2		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	85		85		70-130	0		20
cis-1,3-Dichloropropene	90		91		70-130	1		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	100		95		54-136	5		20
1,1,2,2-Tetrachloroethane	120		110		67-130	9		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	69		72		64-130	4		20
Bromomethane	49		48		39-139	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1194582-3 WG1194582-4								
Vinyl chloride	94		93		55-140	1		20
Chloroethane	100		98		55-138	2		20
1,1-Dichloroethene	92		90		61-145	2		20
trans-1,2-Dichloroethene	96		96		70-130	0		20
Trichloroethene	98		97		70-130	1		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		99		70-130	1		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	85		88		63-130	3		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	98		98		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	120		110		64-130	9		20
Acrylonitrile	120		120		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	56		55		36-147	2		20
Acetone	130		130		58-148	0		20
Carbon disulfide	86		86		51-130	0		20
2-Butanone	140	Q	140	Q	63-138	0		20
Vinyl acetate	130		130		70-130	0		20
4-Methyl-2-pentanone	110		110		59-130	0		20
2-Hexanone	120		120		57-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery		RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual	Limits	RPD			
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1194582-3 WG1194582-4									
Bromochloromethane	99		100		70-130		1		20
2,2-Dichloropropane	67		64		63-133		5		20
1,2-Dibromoethane	99		100		70-130		1		20
1,3-Dichloropropane	110		110		70-130		0		20
1,1,1,2-Tetrachloroethane	93		94		64-130		1		20
Bromobenzene	100		100		70-130		0		20
n-Butylbenzene	120		110		53-136		9		20
sec-Butylbenzene	110		110		70-130		0		20
tert-Butylbenzene	110		110		70-130		0		20
o-Chlorotoluene	110		110		70-130		0		20
p-Chlorotoluene	110		110		70-130		0		20
1,2-Dibromo-3-chloropropane	92		94		41-144		2		20
Hexachlorobutadiene	100		98		63-130		2		20
Isopropylbenzene	110		110		70-130		0		20
p-Isopropyltoluene	110		110		70-130		0		20
Naphthalene	110		110		70-130		0		20
n-Propylbenzene	120		110		69-130		9		20
1,2,3-Trichlorobenzene	100		100		70-130		0		20
1,2,4-Trichlorobenzene	99		99		70-130		0		20
1,3,5-Trimethylbenzene	110		110		64-130		0		20
1,2,4-Trimethylbenzene	110		110		70-130		0		20
1,4-Dioxane	120		120		56-162		0		20
p-Diethylbenzene	110		110		70-130		0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1194582-3 WG1194582-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	110		100		70-130	10		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	100		100		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	110		112		70-130
Toluene-d8	105		105		70-130
4-Bromofluorobenzene	113		112		70-130
Dibromofluoromethane	98		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06-09 Batch: WG1195020-3 WG1195020-4								
Methylene chloride	103		96		70-130	7		30
1,1-Dichloroethane	108		101		70-130	7		30
Chloroform	108		101		70-130	7		30
Carbon tetrachloride	108		101		70-130	7		30
1,2-Dichloropropane	104		99		70-130	5		30
Dibromochloromethane	109		103		70-130	6		30
1,1,2-Trichloroethane	106		101		70-130	5		30
Tetrachloroethene	111		103		70-130	7		30
Chlorobenzene	108		101		70-130	7		30
Trichlorofluoromethane	118		107		70-139	10		30
1,2-Dichloroethane	104		99		70-130	5		30
1,1,1-Trichloroethane	108		101		70-130	7		30
Bromodichloromethane	108		102		70-130	6		30
trans-1,3-Dichloropropene	111		106		70-130	5		30
cis-1,3-Dichloropropene	104		98		70-130	6		30
1,1-Dichloropropene	118		109		70-130	8		30
Bromoform	105		101		70-130	4		30
1,1,2,2-Tetrachloroethane	101		97		70-130	4		30
Benzene	107		99		70-130	8		30
Toluene	112		105		70-130	6		30
Ethylbenzene	113		105		70-130	7		30
Chloromethane	118		107		52-130	10		30
Bromomethane	109		100		57-147	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06-09 Batch: WG1195020-3 WG1195020-4								
Vinyl chloride	117		108		67-130	8		30
Chloroethane	114		99		50-151	14		30
1,1-Dichloroethene	110		100		65-135	10		30
trans-1,2-Dichloroethene	107		100		70-130	7		30
Trichloroethene	110		102		70-130	8		30
1,2-Dichlorobenzene	106		101		70-130	5		30
1,3-Dichlorobenzene	109		104		70-130	5		30
1,4-Dichlorobenzene	107		102		70-130	5		30
Methyl tert butyl ether	103		98		66-130	5		30
p/m-Xylene	114		106		70-130	7		30
o-Xylene	110		103		70-130	7		30
cis-1,2-Dichloroethene	108		101		70-130	7		30
Dibromomethane	101		97		70-130	4		30
Styrene	114		106		70-130	7		30
Dichlorodifluoromethane	123		115		30-146	7		30
Acetone	98		93		54-140	5		30
Carbon disulfide	102		93		59-130	9		30
2-Butanone	94		87		70-130	8		30
Vinyl acetate	90		85		70-130	6		30
4-Methyl-2-pentanone	95		87		70-130	9		30
1,2,3-Trichloropropane	105		99		68-130	6		30
2-Hexanone	96		90		70-130	6		30
Bromochloromethane	108		102		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06-09 Batch: WG1195020-3 WG1195020-4								
2,2-Dichloropropane	110		101		70-130	9		30
1,2-Dibromoethane	106		100		70-130	6		30
1,3-Dichloropropane	108		103		69-130	5		30
1,1,1,2-Tetrachloroethane	111		104		70-130	7		30
Bromobenzene	108		103		70-130	5		30
n-Butylbenzene	113		106		70-130	6		30
sec-Butylbenzene	113		107		70-130	5		30
tert-Butylbenzene	112		106		70-130	6		30
o-Chlorotoluene	113		103		70-130	9		30
p-Chlorotoluene	112		106		70-130	6		30
1,2-Dibromo-3-chloropropane	103		95		68-130	8		30
Hexachlorobutadiene	108		102		67-130	6		30
Isopropylbenzene	112		105		70-130	6		30
p-Isopropyltoluene	113		106		70-130	6		30
Naphthalene	105		100		70-130	5		30
Acrylonitrile	108		102		70-130	6		30
n-Propylbenzene	114		107		70-130	6		30
1,2,3-Trichlorobenzene	104		100		70-130	4		30
1,2,4-Trichlorobenzene	107		101		70-130	6		30
1,3,5-Trimethylbenzene	113		106		70-130	6		30
1,2,4-Trimethylbenzene	115		107		70-130	7		30
1,4-Dioxane	96		90		65-136	6		30
p-Diethylbenzene	101		94		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06-09 Batch: WG1195020-3 WG1195020-4								
p-Ethyltoluene	107		101		70-130	6		30
1,2,4,5-Tetramethylbenzene	102		96		70-130	6		30
Ethyl ether	109		102		67-130	7		30
trans-1,4-Dichloro-2-butene	106		100		70-130	6		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		94		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	95		96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1195021-3 WG1195021-4								
Methylene chloride	103		96		70-130	7		30
1,1-Dichloroethane	108		101		70-130	7		30
Chloroform	108		101		70-130	7		30
Carbon tetrachloride	108		101		70-130	7		30
1,2-Dichloropropane	104		99		70-130	5		30
Dibromochloromethane	109		103		70-130	6		30
1,1,2-Trichloroethane	106		101		70-130	5		30
Tetrachloroethene	111		103		70-130	7		30
Chlorobenzene	108		101		70-130	7		30
Trichlorofluoromethane	118		107		70-139	10		30
1,2-Dichloroethane	104		99		70-130	5		30
1,1,1-Trichloroethane	108		101		70-130	7		30
Bromodichloromethane	108		102		70-130	6		30
trans-1,3-Dichloropropene	111		106		70-130	5		30
cis-1,3-Dichloropropene	104		98		70-130	6		30
1,1-Dichloropropene	118		109		70-130	8		30
Bromoform	105		101		70-130	4		30
1,1,2,2-Tetrachloroethane	101		97		70-130	4		30
Benzene	107		99		70-130	8		30
Toluene	112		105		70-130	6		30
Ethylbenzene	113		105		70-130	7		30
Chloromethane	118		107		52-130	10		30
Bromomethane	109		100		57-147	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1195021-3 WG1195021-4								
Vinyl chloride	117		108		67-130	8		30
Chloroethane	114		99		50-151	14		30
1,1-Dichloroethene	110		100		65-135	10		30
trans-1,2-Dichloroethene	107		100		70-130	7		30
Trichloroethene	110		102		70-130	8		30
1,2-Dichlorobenzene	106		101		70-130	5		30
1,3-Dichlorobenzene	109		104		70-130	5		30
1,4-Dichlorobenzene	107		102		70-130	5		30
Methyl tert butyl ether	103		98		66-130	5		30
p/m-Xylene	114		106		70-130	7		30
o-Xylene	110		103		70-130	7		30
cis-1,2-Dichloroethene	108		101		70-130	7		30
Dibromomethane	101		97		70-130	4		30
Styrene	114		106		70-130	7		30
Dichlorodifluoromethane	123		115		30-146	7		30
Acetone	98		93		54-140	5		30
Carbon disulfide	102		93		59-130	9		30
2-Butanone	94		87		70-130	8		30
Vinyl acetate	90		85		70-130	6		30
4-Methyl-2-pentanone	95		87		70-130	9		30
1,2,3-Trichloropropane	105		99		68-130	6		30
2-Hexanone	96		90		70-130	6		30
Bromochloromethane	108		102		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1195021-3 WG1195021-4								
2,2-Dichloropropane	110		101		70-130	9		30
1,2-Dibromoethane	106		100		70-130	6		30
1,3-Dichloropropane	108		103		69-130	5		30
1,1,1,2-Tetrachloroethane	111		104		70-130	7		30
Bromobenzene	108		103		70-130	5		30
n-Butylbenzene	113		106		70-130	6		30
sec-Butylbenzene	113		107		70-130	5		30
tert-Butylbenzene	112		106		70-130	6		30
o-Chlorotoluene	113		103		70-130	9		30
p-Chlorotoluene	112		106		70-130	6		30
1,2-Dibromo-3-chloropropane	103		95		68-130	8		30
Hexachlorobutadiene	108		102		67-130	6		30
Isopropylbenzene	112		105		70-130	6		30
p-Isopropyltoluene	113		106		70-130	6		30
Naphthalene	105		100		70-130	5		30
Acrylonitrile	108		102		70-130	6		30
n-Propylbenzene	114		107		70-130	6		30
1,2,3-Trichlorobenzene	104		100		70-130	4		30
1,2,4-Trichlorobenzene	107		101		70-130	6		30
1,3,5-Trimethylbenzene	113		106		70-130	6		30
1,2,4-Trimethylbenzene	115		107		70-130	7		30
1,4-Dioxane	96		90		65-136	6		30
p-Diethylbenzene	101		94		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1195021-3 WG1195021-4								
p-Ethyltoluene	107		101		70-130	6		30
1,2,4,5-Tetramethylbenzene	102		96		70-130	6		30
Ethyl ether	109		102		67-130	7		30
trans-1,4-Dichloro-2-butene	106		100		70-130	6		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		94		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	95		96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1195241-3 WG1195241-4								
Methylene chloride	91		91		70-130	0		30
1,1-Dichloroethane	96		95		70-130	1		30
Chloroform	97		96		70-130	1		30
Carbon tetrachloride	102		99		70-130	3		30
1,2-Dichloropropane	96		96		70-130	0		30
Dibromochloromethane	99		99		70-130	0		30
1,1,2-Trichloroethane	98		97		70-130	1		30
Tetrachloroethene	104		102		70-130	2		30
Chlorobenzene	99		99		70-130	0		30
Trichlorofluoromethane	104		100		70-139	4		30
1,2-Dichloroethane	96		94		70-130	2		30
1,1,1-Trichloroethane	101		100		70-130	1		30
Bromodichloromethane	99		97		70-130	2		30
trans-1,3-Dichloropropene	100		100		70-130	0		30
cis-1,3-Dichloropropene	99		97		70-130	2		30
1,1-Dichloropropene	103		102		70-130	1		30
Bromoform	101		100		70-130	1		30
1,1,2,2-Tetrachloroethane	99		98		70-130	1		30
Benzene	97		96		70-130	1		30
Toluene	101		100		70-130	1		30
Ethylbenzene	103		102		70-130	1		30
Chloromethane	96		94		52-130	2		30
Bromomethane	89		88		57-147	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1195241-3 WG1195241-4								
Vinyl chloride	99		98		67-130	1		30
Chloroethane	97		94		50-151	3		30
1,1-Dichloroethene	101		99		65-135	2		30
trans-1,2-Dichloroethene	98		97		70-130	1		30
Trichloroethene	99		97		70-130	2		30
1,2-Dichlorobenzene	100		99		70-130	1		30
1,3-Dichlorobenzene	102		101		70-130	1		30
1,4-Dichlorobenzene	100		100		70-130	0		30
Methyl tert butyl ether	96		95		66-130	1		30
p/m-Xylene	104		102		70-130	2		30
o-Xylene	103		103		70-130	0		30
cis-1,2-Dichloroethene	96		95		70-130	1		30
Dibromomethane	94		94		70-130	0		30
Styrene	104		104		70-130	0		30
Dichlorodifluoromethane	103		100		30-146	3		30
Acetone	95		94		54-140	1		30
Carbon disulfide	95		93		59-130	2		30
2-Butanone	92		92		70-130	0		30
Vinyl acetate	95		94		70-130	1		30
4-Methyl-2-pentanone	93		94		70-130	1		30
1,2,3-Trichloropropane	99		98		68-130	1		30
2-Hexanone	97		96		70-130	1		30
Bromochloromethane	96		96		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1195241-3 WG1195241-4								
2,2-Dichloropropane	101		99		70-130	2		30
1,2-Dibromoethane	99		99		70-130	0		30
1,3-Dichloropropane	99		100		69-130	1		30
1,1,1,2-Tetrachloroethane	102		101		70-130	1		30
Bromobenzene	101		100		70-130	1		30
n-Butylbenzene	107		106		70-130	1		30
sec-Butylbenzene	108		106		70-130	2		30
tert-Butylbenzene	107		106		70-130	1		30
o-Chlorotoluene	106		102		70-130	4		30
p-Chlorotoluene	104		103		70-130	1		30
1,2-Dibromo-3-chloropropane	97		96		68-130	1		30
Hexachlorobutadiene	105		104		67-130	1		30
Isopropylbenzene	106		105		70-130	1		30
p-Isopropyltoluene	107		107		70-130	0		30
Naphthalene	98		99		70-130	1		30
Acrylonitrile	98		97		70-130	1		30
n-Propylbenzene	106		104		70-130	2		30
1,2,3-Trichlorobenzene	99		97		70-130	2		30
1,2,4-Trichlorobenzene	100		100		70-130	0		30
1,3,5-Trimethylbenzene	105		104		70-130	1		30
1,2,4-Trimethylbenzene	105		104		70-130	1		30
1,4-Dioxane	96		96		65-136	0		30
p-Diethylbenzene	105		105		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1195241-3 WG1195241-4								
p-Ethyltoluene	106		104		70-130	2		30
1,2,4,5-Tetramethylbenzene	104		104		70-130	0		30
Ethyl ether	97		95		67-130	2		30
trans-1,4-Dichloro-2-butene	100		98		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	92		91		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	94		94		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG1194141-6 WG1194141-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
Methylene chloride	ND	166	110	65	Q	95	69	Q	70-130	12		30
1,1-Dichloroethane	ND	166	120	73		110	79		70-130	10		30
Chloroform	ND	166	120	74		110	77		70-130	13		30
Carbon tetrachloride	ND	166	100	62	Q	110	82		70-130	9		30
1,2-Dichloropropane	ND	166	110	63	Q	91	66	Q	70-130	15		30
Dibromochloromethane	ND	166	79	48	Q	66	48	Q	70-130	18		30
1,1,2-Trichloroethane	ND	166	91	55	Q	78	56	Q	70-130	15		30
Tetrachloroethene	ND	166	100	61	Q	88	64	Q	70-130	13		30
Chlorobenzene	ND	166	81	49	Q	66	48	Q	70-130	19		30
Trichlorofluoromethane	ND	166	170	104		170	122		70-139	2		30
1,2-Dichloroethane	ND	166	98	59	Q	84	61	Q	70-130	15		30
1,1,1-Trichloroethane	ND	166	140	84		130	93		70-130	8		30
Bromodichloromethane	ND	166	97	59	Q	84	61	Q	70-130	14		30
trans-1,3-Dichloropropene	ND	166	61	36	Q	51	37	Q	70-130	17		30
cis-1,3-Dichloropropene	ND	166	71	43	Q	61	44	Q	70-130	16		30
1,1-Dichloropropene	ND	166	130	75		120	86		70-130	5		30
Bromoform	ND	166	71	43	Q	58	42	Q	70-130	20		30
1,1,2,2-Tetrachloroethane	ND	166	73	44	Q	62	45	Q	70-130	16		30
Benzene	ND	166	120	71		100	75		70-130	13		30
Toluene	ND	166	99	60	Q	84	60	Q	70-130	17		30
Ethylbenzene	ND	166	90	54	Q	72	52	Q	70-130	22		30
Chloromethane	ND	166	130	77		120	83		52-130	10		30
Bromomethane	ND	166	110	65		100	75		57-147	4		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG1194141-6 WG1194141-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
Vinyl chloride	ND	166	140	87		140	100		67-130	4		30
Chloroethane	ND	166	130	78		120	85		50-151	10		30
1,1-Dichloroethene	ND	166	130	81		130	96		65-135	1		30
trans-1,2-Dichloroethene	ND	166	110	64	Q	100	74		70-130	3		30
Trichloroethene	ND	166	110	66	Q	99	72		70-130	10		30
1,2-Dichlorobenzene	ND	166	56	34	Q	48	35	Q	70-130	15		30
1,3-Dichlorobenzene	ND	166	56	34	Q	48	35	Q	70-130	15		30
1,4-Dichlorobenzene	ND	166	53	32	Q	44	32	Q	70-130	19		30
Methyl tert butyl ether	ND	166	110	67		97	70		66-130	13		30
p/m-Xylene	ND	332	180	53	Q	140	50	Q	70-130	24		30
o-Xylene	ND	332	180	53	Q	140	50	Q	70-130	23		30
cis-1,2-Dichloroethene	ND	166	110	64	Q	96	70		70-130	10		30
Dibromomethane	ND	166	98	59	Q	84	60	Q	70-130	16		30
Styrene	ND	332	90	27	Q	83	30	Q	70-130	9		30
Dichlorodifluoromethane	ND	166	130	76		130	90		30-146	1		30
Acetone	70	166	170	58		130	43	Q	54-140	25		30
Carbon disulfide	15J	166	130	77		130	91		59-130	2		30
2-Butanone	9.4J	166	100	62	Q	85	61	Q	70-130	19		30
Vinyl acetate	ND	166	32	19	Q	29	21	Q	70-130	8		30
4-Methyl-2-pentanone	ND	166	79	48	Q	68	49	Q	70-130	15		30
1,2,3-Trichloropropane	ND	166	80	48	Q	67	49	Q	68-130	17		30
2-Hexanone	ND	166	69	42	Q	59	43	Q	70-130	16		30
Bromochloromethane	ND	166	110	69	Q	96	69	Q	70-130	17		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG1194141-6 WG1194141-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
2,2-Dichloropropane	ND	166	130	79		120	89		70-130	6		30
1,2-Dibromoethane	ND	166	77	46	Q	64	46	Q	70-130	18		30
1,3-Dichloropropane	ND	166	86	52	Q	73	53	Q	69-130	16		30
1,1,1,2-Tetrachloroethane	ND	166	85	51	Q	71	51	Q	70-130	18		30
Bromobenzene	ND	166	69	41	Q	56	41	Q	70-130	20		30
n-Butylbenzene	ND	166	63	38	Q	49	36	Q	70-130	23		30
sec-Butylbenzene	ND	166	73	44	Q	59	43	Q	70-130	21		30
tert-Butylbenzene	ND	166	81	49	Q	66	48	Q	70-130	20		30
o-Chlorotoluene	ND	166	82	49	Q	65	47	Q	70-130	23		30
p-Chlorotoluene	ND	166	65	39	Q	52	38	Q	70-130	23		30
1,2-Dibromo-3-chloropropane	ND	166	68	41	Q	59	42	Q	68-130	14		30
Hexachlorobutadiene	ND	166	47	28	Q	44	32	Q	67-130	7		30
Isopropylbenzene	ND	166	88	53	Q	72	52	Q	70-130	20		30
p-Isopropyltoluene	ND	166	73	44	Q	57	41	Q	70-130	24		30
Naphthalene	ND	166	34	20	Q	35	26	Q	70-130	4		30
Acrylonitrile	ND	166	77	47	Q	65	47	Q	70-130	17		30
n-Propylbenzene	ND	166	79	48	Q	62	45	Q	70-130	25		30
1,2,3-Trichlorobenzene	ND	166	30	18	Q	31	23	Q	70-130	5		30
1,2,4-Trichlorobenzene	ND	166	32	20	Q	33	24	Q	70-130	3		30
1,3,5-Trimethylbenzene	ND	166	79	48	Q	63	45	Q	70-130	23		30
1,2,4-Trimethylbenzene	ND	166	74	44	Q	58	42	Q	70-130	24		30
1,4-Dioxane	ND	8290	4800	57	Q	3700	54	Q	65-136	25		30
p-Diethylbenzene	ND	166	63	38	Q	49	35	Q	70-130	26		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG1194141-6 WG1194141-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
p-Ethyltoluene	ND	166	75	45	Q	57	41	Q	70-130	27		30
1,2,4,5-Tetramethylbenzene	ND	166	53	32	Q	48	35	Q	70-130	10		30
Ethyl ether	ND	166	110	68		99	72		67-130	13		30
trans-1,4-Dichloro-2-butene	ND	166	28	17	Q	21	15	Q	70-130	32	Q	30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	108		105		70-130
4-Bromofluorobenzene	99		102		70-130
Dibromofluoromethane	112		111		70-130
Toluene-d8	97		97		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 01:49
 Analyst: EK
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	160		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	3600		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	430		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	100	J	ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	1800		ug/kg	120	22.	1
Benzo(a)pyrene	1800		ug/kg	160	48.	1
Benzo(b)fluoranthene	2600		ug/kg	120	33.	1
Benzo(k)fluoranthene	850		ug/kg	120	32.	1
Chrysene	2300		ug/kg	120	20.	1
Acenaphthylene	660		ug/kg	160	30.	1
Anthracene	540		ug/kg	120	38.	1
Benzo(ghi)perylene	1900		ug/kg	160	23.	1
Fluorene	210		ug/kg	200	19.	1
Phenanthrene	2800		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	390		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	1600		ug/kg	160	28.	1
Pyrene	3400		ug/kg	120	20.	1
Biphenyl	50	J	ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	140	J	ug/kg	200	19.	1
2-Methylnaphthalene	170	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	350		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	430	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	95.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	34	J	ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	54	J	ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	440		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		25-120
Phenol-d6	43		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	63		30-120
2,4,6-Tribromophenol	41		10-136
4-Terphenyl-d14	52		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02 D
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/07/19 03:30
 Analyst: EK
 Percent Solids: 63%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	12000		ug/kg	1000	130	5
1,2,4-Trichlorobenzene	ND		ug/kg	1300	150	5
Hexachlorobenzene	ND		ug/kg	780	140	5
Bis(2-chloroethyl)ether	ND		ug/kg	1200	180	5
2-Chloronaphthalene	ND		ug/kg	1300	130	5
1,2-Dichlorobenzene	ND		ug/kg	1300	230	5
1,3-Dichlorobenzene	ND		ug/kg	1300	220	5
1,4-Dichlorobenzene	ND		ug/kg	1300	230	5
3,3'-Dichlorobenzidine	ND		ug/kg	1300	340	5
2,4-Dinitrotoluene	ND		ug/kg	1300	260	5
2,6-Dinitrotoluene	ND		ug/kg	1300	220	5
Fluoranthene	17000		ug/kg	780	150	5
4-Chlorophenyl phenyl ether	ND		ug/kg	1300	140	5
4-Bromophenyl phenyl ether	ND		ug/kg	1300	200	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1600	220	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1400	130	5
Hexachlorobutadiene	ND		ug/kg	1300	190	5
Hexachlorocyclopentadiene	ND		ug/kg	3700	1200	5
Hexachloroethane	ND		ug/kg	1000	210	5
Isophorone	ND		ug/kg	1200	170	5
Naphthalene	5100		ug/kg	1300	160	5
Nitrobenzene	ND		ug/kg	1200	190	5
NDPA/DPA	ND		ug/kg	1000	150	5
n-Nitrosodi-n-propylamine	ND		ug/kg	1300	200	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1300	450	5
Butyl benzyl phthalate	ND		ug/kg	1300	330	5
Di-n-butylphthalate	ND		ug/kg	1300	250	5
Di-n-octylphthalate	ND		ug/kg	1300	440	5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-02 D

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1300	120	5
Dimethyl phthalate	ND		ug/kg	1300	270	5
Benzo(a)anthracene	10000		ug/kg	780	150	5
Benzo(a)pyrene	13000		ug/kg	1000	320	5
Benzo(b)fluoranthene	11000		ug/kg	780	220	5
Benzo(k)fluoranthene	2200		ug/kg	780	210	5
Chrysene	12000		ug/kg	780	140	5
Acenaphthylene	10000		ug/kg	1000	200	5
Anthracene	3700		ug/kg	780	250	5
Benzo(ghi)perylene	5500		ug/kg	1000	150	5
Fluorene	2300		ug/kg	1300	130	5
Phenanthrene	3300		ug/kg	780	160	5
Dibenzo(a,h)anthracene	1200		ug/kg	780	150	5
Indeno(1,2,3-cd)pyrene	4200		ug/kg	1000	180	5
Pyrene	29000		ug/kg	780	130	5
Biphenyl	690	J	ug/kg	3000	300	5
4-Chloroaniline	ND		ug/kg	1300	240	5
2-Nitroaniline	ND		ug/kg	1300	250	5
3-Nitroaniline	ND		ug/kg	1300	240	5
4-Nitroaniline	ND		ug/kg	1300	540	5
Dibenzofuran	420	J	ug/kg	1300	120	5
2-Methylnaphthalene	1700		ug/kg	1600	160	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1300	140	5
Acetophenone	ND		ug/kg	1300	160	5
2,4,6-Trichlorophenol	ND		ug/kg	780	250	5
p-Chloro-m-cresol	ND		ug/kg	1300	190	5
2-Chlorophenol	ND		ug/kg	1300	150	5
2,4-Dichlorophenol	ND		ug/kg	1200	210	5
2,4-Dimethylphenol	ND		ug/kg	1300	430	5
2-Nitrophenol	ND		ug/kg	2800	490	5
4-Nitrophenol	ND		ug/kg	1800	530	5
2,4-Dinitrophenol	ND		ug/kg	6200	600	5
4,6-Dinitro-o-cresol	ND		ug/kg	3400	620	5
Pentachlorophenol	ND		ug/kg	1000	290	5
Phenol	ND		ug/kg	1300	200	5
2-Methylphenol	ND		ug/kg	1300	200	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1900	200	5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-02 D

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1300	250	5
Benzoic Acid	ND		ug/kg	4200	1300	5
Benzyl Alcohol	ND		ug/kg	1300	400	5
Carbazole	420	J	ug/kg	1300	130	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	105		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	88		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/02/19 22:14
 Analyst: EK
 Percent Solids: 60%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140	J	ug/kg	210	28.	1
1,2,4-Trichlorobenzene	ND		ug/kg	270	31.	1
Hexachlorobenzene	ND		ug/kg	160	30.	1
Bis(2-chloroethyl)ether	ND		ug/kg	240	36.	1
2-Chloronaphthalene	ND		ug/kg	270	26.	1
1,2-Dichlorobenzene	ND		ug/kg	270	48.	1
1,3-Dichlorobenzene	ND		ug/kg	270	46.	1
1,4-Dichlorobenzene	ND		ug/kg	270	47.	1
3,3'-Dichlorobenzidine	ND		ug/kg	270	71.	1
2,4-Dinitrotoluene	ND		ug/kg	270	54.	1
2,6-Dinitrotoluene	ND		ug/kg	270	46.	1
Fluoranthene	270		ug/kg	160	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	270	29.	1
4-Bromophenyl phenyl ether	ND		ug/kg	270	41.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	320	46.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	290	27.	1
Hexachlorobutadiene	ND		ug/kg	270	39.	1
Hexachlorocyclopentadiene	ND		ug/kg	770	240	1
Hexachloroethane	ND		ug/kg	210	43.	1
Isophorone	ND		ug/kg	240	35.	1
Naphthalene	230	J	ug/kg	270	33.	1
Nitrobenzene	ND		ug/kg	240	40.	1
NDPA/DPA	ND		ug/kg	210	30.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	270	41.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	270	93.	1
Butyl benzyl phthalate	ND		ug/kg	270	68.	1
Di-n-butylphthalate	ND		ug/kg	270	51.	1
Di-n-octylphthalate	ND		ug/kg	270	91.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-03

Date Collected: 12/27/18 09:45

Client ID: RB01_25-27

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	270	25.	1
Dimethyl phthalate	ND		ug/kg	270	56.	1
Benzo(a)anthracene	130	J	ug/kg	160	30.	1
Benzo(a)pyrene	120	J	ug/kg	210	65.	1
Benzo(b)fluoranthene	110	J	ug/kg	160	45.	1
Benzo(k)fluoranthene	ND		ug/kg	160	43.	1
Chrysene	120	J	ug/kg	160	28.	1
Acenaphthylene	96	J	ug/kg	210	41.	1
Anthracene	74	J	ug/kg	160	52.	1
Benzo(ghi)perylene	73	J	ug/kg	210	32.	1
Fluorene	56	J	ug/kg	270	26.	1
Phenanthrene	160		ug/kg	160	32.	1
Dibenzo(a,h)anthracene	ND		ug/kg	160	31.	1
Indeno(1,2,3-cd)pyrene	55	J	ug/kg	210	37.	1
Pyrene	390		ug/kg	160	27.	1
Biphenyl	ND		ug/kg	610	62.	1
4-Chloroaniline	ND		ug/kg	270	49.	1
2-Nitroaniline	ND		ug/kg	270	52.	1
3-Nitroaniline	ND		ug/kg	270	50.	1
4-Nitroaniline	ND		ug/kg	270	110	1
Dibenzofuran	29	J	ug/kg	270	25.	1
2-Methylnaphthalene	38	J	ug/kg	320	32.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	270	28.	1
Acetophenone	ND		ug/kg	270	33.	1
2,4,6-Trichlorophenol	ND		ug/kg	160	51.	1
p-Chloro-m-cresol	ND		ug/kg	270	40.	1
2-Chlorophenol	ND		ug/kg	270	32.	1
2,4-Dichlorophenol	ND		ug/kg	240	43.	1
2,4-Dimethylphenol	ND		ug/kg	270	88.	1
2-Nitrophenol	ND		ug/kg	580	100	1
4-Nitrophenol	ND		ug/kg	380	110	1
2,4-Dinitrophenol	ND		ug/kg	1300	120	1
4,6-Dinitro-o-cresol	ND		ug/kg	700	130	1
Pentachlorophenol	ND		ug/kg	210	59.	1
Phenol	ND		ug/kg	270	40.	1
2-Methylphenol	ND		ug/kg	270	42.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	380	42.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	270	51.	1
Benzoic Acid	ND		ug/kg	870	270	1
Benzyl Alcohol	ND		ug/kg	270	82.	1
Carbazole	ND		ug/kg	270	26.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	62		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 04:13
 Analyst: EK
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	54	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1800		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	65	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	1200		ug/kg	190	65.	1
Butyl benzyl phthalate	59	J	ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	200		ug/kg	190	64.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	1000		ug/kg	110	21.	1
Benzo(a)pyrene	760		ug/kg	150	46.	1
Benzo(b)fluoranthene	1000		ug/kg	110	32.	1
Benzo(k)fluoranthene	420		ug/kg	110	30.	1
Chrysene	950		ug/kg	110	19.	1
Acenaphthylene	340		ug/kg	150	29.	1
Anthracene	340		ug/kg	110	36.	1
Benzo(ghi)perylene	550		ug/kg	150	22.	1
Fluorene	66	J	ug/kg	190	18.	1
Phenanthrene	1000		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	150		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	580		ug/kg	150	26.	1
Pyrene	1600		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	430	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	40	J	ug/kg	190	18.	1
2-Methylnaphthalene	35	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	100	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		25-120
Phenol-d6	55		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	56		30-120
2,4,6-Tribromophenol	51		10-136
4-Terphenyl-d14	43		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 04:36
 Analyst: EK
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	38	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1300		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	37	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	700		ug/kg	110	21.	1
Benzo(a)pyrene	590		ug/kg	150	46.	1
Benzo(b)fluoranthene	830		ug/kg	110	32.	1
Benzo(k)fluoranthene	260		ug/kg	110	30.	1
Chrysene	670		ug/kg	110	20.	1
Acenaphthylene	340		ug/kg	150	29.	1
Anthracene	240		ug/kg	110	37.	1
Benzo(ghi)perylene	410		ug/kg	150	22.	1
Fluorene	55	J	ug/kg	190	18.	1
Phenanthrene	770		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	100	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	420		ug/kg	150	26.	1
Pyrene	1100		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	29	J	ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	82	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		25-120
Phenol-d6	58		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	58		10-136
4-Terphenyl-d14	42		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 02:37
 Analyst: EK
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	62	J	ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	1100		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	76	J	ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	510		ug/kg	120	22.	1
Benzo(a)pyrene	500		ug/kg	160	48.	1
Benzo(b)fluoranthene	590		ug/kg	120	33.	1
Benzo(k)fluoranthene	190		ug/kg	120	32.	1
Chrysene	480		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	150		ug/kg	120	38.	1
Benzo(ghi)perylene	340		ug/kg	160	23.	1
Fluorene	55	J	ug/kg	200	19.	1
Phenanthrene	530		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	74	J	ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	330		ug/kg	160	27.	1
Pyrene	990		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	39	J	ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	95.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	51	J	ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	58		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/02/19 21:03
 Analyst: EK
 Percent Solids: 68%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	190	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	240	27.	1
Hexachlorobenzene	ND		ug/kg	140	27.	1
Bis(2-chloroethyl)ether	ND		ug/kg	220	32.	1
2-Chloronaphthalene	ND		ug/kg	240	24.	1
1,2-Dichlorobenzene	ND		ug/kg	240	43.	1
1,3-Dichlorobenzene	ND		ug/kg	240	41.	1
1,4-Dichlorobenzene	ND		ug/kg	240	42.	1
3,3'-Dichlorobenzidine	ND		ug/kg	240	64.	1
2,4-Dinitrotoluene	ND		ug/kg	240	48.	1
2,6-Dinitrotoluene	ND		ug/kg	240	41.	1
Fluoranthene	ND		ug/kg	140	28.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	240	26.	1
4-Bromophenyl phenyl ether	ND		ug/kg	240	36.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	290	41.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	260	24.	1
Hexachlorobutadiene	ND		ug/kg	240	35.	1
Hexachlorocyclopentadiene	ND		ug/kg	680	220	1
Hexachloroethane	ND		ug/kg	190	39.	1
Isophorone	ND		ug/kg	220	31.	1
Naphthalene	ND		ug/kg	240	29.	1
Nitrobenzene	ND		ug/kg	220	35.	1
NDPA/DPA	ND		ug/kg	190	27.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	240	37.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	240	83.	1
Butyl benzyl phthalate	ND		ug/kg	240	60.	1
Di-n-butylphthalate	ND		ug/kg	240	45.	1
Di-n-octylphthalate	ND		ug/kg	240	81.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-07

Date Collected: 12/27/18 13:00

Client ID: RB08_14-16

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	240	22.	1
Dimethyl phthalate	ND		ug/kg	240	50.	1
Benzo(a)anthracene	ND		ug/kg	140	27.	1
Benzo(a)pyrene	ND		ug/kg	190	58.	1
Benzo(b)fluoranthene	ND		ug/kg	140	40.	1
Benzo(k)fluoranthene	ND		ug/kg	140	38.	1
Chrysene	ND		ug/kg	140	25.	1
Acenaphthylene	ND		ug/kg	190	37.	1
Anthracene	ND		ug/kg	140	47.	1
Benzo(ghi)perylene	ND		ug/kg	190	28.	1
Fluorene	ND		ug/kg	240	23.	1
Phenanthrene	ND		ug/kg	140	29.	1
Dibenzo(a,h)anthracene	ND		ug/kg	140	28.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	190	33.	1
Pyrene	29	J	ug/kg	140	24.	1
Biphenyl	ND		ug/kg	550	56.	1
4-Chloroaniline	ND		ug/kg	240	44.	1
2-Nitroaniline	ND		ug/kg	240	46.	1
3-Nitroaniline	ND		ug/kg	240	45.	1
4-Nitroaniline	ND		ug/kg	240	99.	1
Dibenzofuran	ND		ug/kg	240	23.	1
2-Methylnaphthalene	ND		ug/kg	290	29.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	25.	1
Acetophenone	ND		ug/kg	240	30.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	45.	1
p-Chloro-m-cresol	ND		ug/kg	240	36.	1
2-Chlorophenol	ND		ug/kg	240	28.	1
2,4-Dichlorophenol	ND		ug/kg	220	38.	1
2,4-Dimethylphenol	ND		ug/kg	240	79.	1
2-Nitrophenol	ND		ug/kg	520	90.	1
4-Nitrophenol	ND		ug/kg	340	98.	1
2,4-Dinitrophenol	ND		ug/kg	1200	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	620	120	1
Pentachlorophenol	ND		ug/kg	190	53.	1
Phenol	ND		ug/kg	240	36.	1
2-Methylphenol	ND		ug/kg	240	37.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	340	38.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	240	46.	1
Benzoic Acid	ND		ug/kg	780	240	1
Benzyl Alcohol	ND		ug/kg	240	73.	1
Carbazole	ND		ug/kg	240	23.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		25-120
Phenol-d6	61		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	65		10-136
4-Terphenyl-d14	62		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/02/19 20:39
 Analyst: EK
 Percent Solids: 72%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	180	23.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	26.	1
Hexachlorobenzene	ND		ug/kg	130	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1
2-Chloronaphthalene	ND		ug/kg	220	22.	1
1,2-Dichlorobenzene	ND		ug/kg	220	40.	1
1,3-Dichlorobenzene	ND		ug/kg	220	38.	1
1,4-Dichlorobenzene	ND		ug/kg	220	39.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	60.	1
2,4-Dinitrotoluene	ND		ug/kg	220	45.	1
2,6-Dinitrotoluene	ND		ug/kg	220	38.	1
Fluoranthene	ND		ug/kg	130	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	38.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1
Hexachlorobutadiene	ND		ug/kg	220	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	640	200	1
Hexachloroethane	ND		ug/kg	180	36.	1
Isophorone	ND		ug/kg	200	29.	1
Naphthalene	ND		ug/kg	220	27.	1
Nitrobenzene	ND		ug/kg	200	33.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	35.	1
Bis(2-ethylhexyl)phthalate	100	J	ug/kg	220	78.	1
Butyl benzyl phthalate	ND		ug/kg	220	56.	1
Di-n-butylphthalate	ND		ug/kg	220	42.	1
Di-n-octylphthalate	ND		ug/kg	220	76.	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	21.	1
Dimethyl phthalate	ND		ug/kg	220	47.	1
Benzo(a)anthracene	ND		ug/kg	130	25.	1
Benzo(a)pyrene	ND		ug/kg	180	55.	1
Benzo(b)fluoranthene	ND		ug/kg	130	38.	1
Benzo(k)fluoranthene	ND		ug/kg	130	36.	1
Chrysene	ND		ug/kg	130	23.	1
Acenaphthylene	ND		ug/kg	180	35.	1
Anthracene	ND		ug/kg	130	44.	1
Benzo(ghi)perylene	ND		ug/kg	180	26.	1
Fluorene	ND		ug/kg	220	22.	1
Phenanthrene	ND		ug/kg	130	27.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	26.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	180	31.	1
Pyrene	23	J	ug/kg	130	22.	1
Biphenyl	ND		ug/kg	510	52.	1
4-Chloroaniline	ND		ug/kg	220	41.	1
2-Nitroaniline	ND		ug/kg	220	43.	1
3-Nitroaniline	ND		ug/kg	220	42.	1
4-Nitroaniline	ND		ug/kg	220	93.	1
Dibenzofuran	ND		ug/kg	220	21.	1
2-Methylnaphthalene	ND		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
Acetophenone	ND		ug/kg	220	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	42.	1
p-Chloro-m-cresol	ND		ug/kg	220	33.	1
2-Chlorophenol	ND		ug/kg	220	26.	1
2,4-Dichlorophenol	ND		ug/kg	200	36.	1
2,4-Dimethylphenol	ND		ug/kg	220	74.	1
2-Nitrophenol	ND		ug/kg	480	84.	1
4-Nitrophenol	ND		ug/kg	310	92.	1
2,4-Dinitrophenol	ND		ug/kg	1100	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	580	110	1
Pentachlorophenol	ND		ug/kg	180	49.	1
Phenol	ND		ug/kg	220	34.	1
2-Methylphenol	ND		ug/kg	220	35.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	320	35.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
Client ID: SODUP02_122718
Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	220	43.	1
Benzoic Acid	ND		ug/kg	730	230	1
Benzyl Alcohol	ND		ug/kg	220	69.	1
Carbazole	ND		ug/kg	220	22.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		25-120
Phenol-d6	64		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	67		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09 D
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/07/19 03:57
 Analyst: EK
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1300		ug/kg	750	97.	5
1,2,4-Trichlorobenzene	ND		ug/kg	940	110	5
Hexachlorobenzene	ND		ug/kg	560	100	5
Bis(2-chloroethyl)ether	ND		ug/kg	840	130	5
2-Chloronaphthalene	ND		ug/kg	940	93.	5
1,2-Dichlorobenzene	ND		ug/kg	940	170	5
1,3-Dichlorobenzene	ND		ug/kg	940	160	5
1,4-Dichlorobenzene	ND		ug/kg	940	160	5
3,3'-Dichlorobenzidine	ND		ug/kg	940	250	5
2,4-Dinitrotoluene	ND		ug/kg	940	190	5
2,6-Dinitrotoluene	ND		ug/kg	940	160	5
Fluoranthene	4900		ug/kg	560	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	940	100	5
4-Bromophenyl phenyl ether	ND		ug/kg	940	140	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	160	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1000	94.	5
Hexachlorobutadiene	ND		ug/kg	940	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2700	850	5
Hexachloroethane	ND		ug/kg	750	150	5
Isophorone	ND		ug/kg	840	120	5
Naphthalene	1800		ug/kg	940	110	5
Nitrobenzene	ND		ug/kg	840	140	5
NDPA/DPA	ND		ug/kg	750	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	940	140	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	940	320	5
Butyl benzyl phthalate	ND		ug/kg	940	240	5
Di-n-butylphthalate	ND		ug/kg	940	180	5
Di-n-octylphthalate	ND		ug/kg	940	320	5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-09 D

Date Collected: 12/27/18 09:35

Client ID: RB01_9-11

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	940	87.	5
Dimethyl phthalate	ND		ug/kg	940	200	5
Benzo(a)anthracene	3700		ug/kg	560	100	5
Benzo(a)pyrene	4700		ug/kg	750	230	5
Benzo(b)fluoranthene	3800		ug/kg	560	160	5
Benzo(k)fluoranthene	1100		ug/kg	560	150	5
Chrysene	3700		ug/kg	560	98.	5
Acenaphthylene	14000		ug/kg	750	140	5
Anthracene	1400		ug/kg	560	180	5
Benzo(ghi)perylene	4200		ug/kg	750	110	5
Fluorene	2100		ug/kg	940	91.	5
Phenanthrene	2400		ug/kg	560	110	5
Dibenzo(a,h)anthracene	680		ug/kg	560	110	5
Indeno(1,2,3-cd)pyrene	2600		ug/kg	750	130	5
Pyrene	9600		ug/kg	560	93.	5
Biphenyl	340	J	ug/kg	2100	220	5
4-Chloroaniline	ND		ug/kg	940	170	5
2-Nitroaniline	ND		ug/kg	940	180	5
3-Nitroaniline	ND		ug/kg	940	180	5
4-Nitroaniline	ND		ug/kg	940	390	5
Dibenzofuran	ND		ug/kg	940	89.	5
2-Methylnaphthalene	750	J	ug/kg	1100	110	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	940	98.	5
Acetophenone	ND		ug/kg	940	120	5
2,4,6-Trichlorophenol	ND		ug/kg	560	180	5
p-Chloro-m-cresol	ND		ug/kg	940	140	5
2-Chlorophenol	ND		ug/kg	940	110	5
2,4-Dichlorophenol	ND		ug/kg	840	150	5
2,4-Dimethylphenol	ND		ug/kg	940	310	5
2-Nitrophenol	ND		ug/kg	2000	350	5
4-Nitrophenol	ND		ug/kg	1300	380	5
2,4-Dinitrophenol	ND		ug/kg	4500	440	5
4,6-Dinitro-o-cresol	ND		ug/kg	2400	450	5
Pentachlorophenol	ND		ug/kg	750	210	5
Phenol	ND		ug/kg	940	140	5
2-Methylphenol	ND		ug/kg	940	140	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1400	150	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09 D
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	940	180	5
Benzoic Acid	ND		ug/kg	3000	950	5
Benzyl Alcohol	ND		ug/kg	940	290	5
Carbazole	390	J	ug/kg	940	91.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	98		25-120
Phenol-d6	93		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	92		30-120
2,4,6-Tribromophenol	105		10-136
4-Terphenyl-d14	81		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 05:11
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 12/29/18 12:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	32		10-120
4-Terphenyl-d14	64		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/05/19 14:24
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/04/19 15:29

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.04	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.03	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.03	J	ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	94		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/30/18 01:36
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1193399-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/30/18 01:36
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1193399-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 12/30/18 01:36
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1193399-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	72		10-136
4-Terphenyl-d14	69		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/19 00:52
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 12/29/18 12:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1193790-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/19 00:52
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 12/29/18 12:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1193790-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/04/19 00:52
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 12/29/18 12:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1193790-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	55		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/05/19 12:27
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/04/19 08:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG1194717-1					
Acenaphthene	0.02	J	ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	0.22		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	0.07	J	ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/05/19 12:27
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/04/19 08:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG1194717-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	94		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1193399-2 WG1193399-3								
Acenaphthene	66		65		31-137	2		50
1,2,4-Trichlorobenzene	83		78		38-107	6		50
Hexachlorobenzene	70		70		40-140	0		50
Bis(2-chloroethyl)ether	80		75		40-140	6		50
2-Chloronaphthalene	80		80		40-140	0		50
1,2-Dichlorobenzene	81		75		40-140	8		50
1,3-Dichlorobenzene	78		73		40-140	7		50
1,4-Dichlorobenzene	81		73		28-104	10		50
3,3'-Dichlorobenzidine	73		68		40-140	7		50
2,4-Dinitrotoluene	85		85		40-132	0		50
2,6-Dinitrotoluene	92		91		40-140	1		50
Fluoranthene	75		77		40-140	3		50
4-Chlorophenyl phenyl ether	68		66		40-140	3		50
4-Bromophenyl phenyl ether	70		68		40-140	3		50
Bis(2-chloroisopropyl)ether	73		67		40-140	9		50
Bis(2-chloroethoxy)methane	80		75		40-117	6		50
Hexachlorobutadiene	74		70		40-140	6		50
Hexachlorocyclopentadiene	70		67		40-140	4		50
Hexachloroethane	77		74		40-140	4		50
Isophorone	80		74		40-140	8		50
Naphthalene	78		75		40-140	4		50
Nitrobenzene	86		79		40-140	8		50
NDPA/DPA	70		68		36-157	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1193399-2 WG1193399-3								
n-Nitrosodi-n-propylamine	77		72		32-121	7		50
Bis(2-ethylhexyl)phthalate	89		90		40-140	1		50
Butyl benzyl phthalate	86		85		40-140	1		50
Di-n-butylphthalate	83		84		40-140	1		50
Di-n-octylphthalate	93		92		40-140	1		50
Diethyl phthalate	72		72		40-140	0		50
Dimethyl phthalate	80		79		40-140	1		50
Benzo(a)anthracene	71		71		40-140	0		50
Benzo(a)pyrene	83		84		40-140	1		50
Benzo(b)fluoranthene	83		81		40-140	2		50
Benzo(k)fluoranthene	77		82		40-140	6		50
Chrysene	74		76		40-140	3		50
Acenaphthylene	82		82		40-140	0		50
Anthracene	78		79		40-140	1		50
Benzo(ghi)perylene	78		77		40-140	1		50
Fluorene	72		73		40-140	1		50
Phenanthrene	73		76		40-140	4		50
Dibenzo(a,h)anthracene	75		76		40-140	1		50
Indeno(1,2,3-cd)pyrene	78		77		40-140	1		50
Pyrene	74		76		35-142	3		50
Biphenyl	83		81		54-104	2		50
4-Chloroaniline	58		57		40-140	2		50
2-Nitroaniline	97		96		47-134	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1193399-2 WG1193399-3								
3-Nitroaniline	68		71		26-129	4		50
4-Nitroaniline	75		74		41-125	1		50
Dibenzofuran	72		73		40-140	1		50
2-Methylnaphthalene	77		76		40-140	1		50
1,2,4,5-Tetrachlorobenzene	83		80		40-117	4		50
Acetophenone	85		79		14-144	7		50
2,4,6-Trichlorophenol	86		86		30-130	0		50
p-Chloro-m-cresol	83		82		26-103	1		50
2-Chlorophenol	91		83		25-102	9		50
2,4-Dichlorophenol	94		91		30-130	3		50
2,4-Dimethylphenol	91		87		30-130	4		50
2-Nitrophenol	105		100		30-130	5		50
4-Nitrophenol	86		84		11-114	2		50
2,4-Dinitrophenol	90		89		4-130	1		50
4,6-Dinitro-o-cresol	86		86		10-130	0		50
Pentachlorophenol	87		84		17-109	4		50
Phenol	82		75		26-90	9		50
2-Methylphenol	88		82		30-130.	7		50
3-Methylphenol/4-Methylphenol	95		89		30-130	7		50
2,4,5-Trichlorophenol	89		87		30-130	2		50
Benzoic Acid	56		57		10-110	2		50
Benzyl Alcohol	84		78		40-140	7		50
Carbazole	78		79		54-128	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1193399-2 WG1193399-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	91		82		25-120
Phenol-d6	88		83		10-120
Nitrobenzene-d5	90		83		23-120
2-Fluorobiphenyl	80		78		30-120
2,4,6-Tribromophenol	79		79		10-136
4-Terphenyl-d14	69		70		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1193790-2 WG1193790-3								
Acenaphthene	67		67		37-111	0		30
1,2,4-Trichlorobenzene	63		61		39-98	3		30
Hexachlorobenzene	63		65		40-140	3		30
Bis(2-chloroethyl)ether	73		69		40-140	6		30
2-Chloronaphthalene	65		63		40-140	3		30
1,2-Dichlorobenzene	65		60		40-140	8		30
1,3-Dichlorobenzene	61		58		40-140	5		30
1,4-Dichlorobenzene	62		61		36-97	2		30
3,3'-Dichlorobenzidine	40		35	Q	40-140	13		30
2,4-Dinitrotoluene	70		72		48-143	3		30
2,6-Dinitrotoluene	68		68		40-140	0		30
Fluoranthene	68		72		40-140	6		30
4-Chlorophenyl phenyl ether	67		67		40-140	0		30
4-Bromophenyl phenyl ether	68		69		40-140	1		30
Bis(2-chloroisopropyl)ether	85		83		40-140	2		30
Bis(2-chloroethoxy)methane	74		73		40-140	1		30
Hexachlorobutadiene	66		62		40-140	6		30
Hexachlorocyclopentadiene	60		59		40-140	2		30
Hexachloroethane	65		61		40-140	6		30
Isophorone	75		76		40-140	1		30
Naphthalene	66		64		40-140	3		30
Nitrobenzene	70		68		40-140	3		30
NDPA/DPA	64		65		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1193790-2 WG1193790-3								
n-Nitrosodi-n-propylamine	76		75		29-132	1		30
Bis(2-ethylhexyl)phthalate	93		91		40-140	2		30
Butyl benzyl phthalate	67		69		40-140	3		30
Di-n-butylphthalate	71		75		40-140	5		30
Di-n-octylphthalate	83		86		40-140	4		30
Diethyl phthalate	66		71		40-140	7		30
Dimethyl phthalate	66		66		40-140	0		30
Benzo(a)anthracene	73		74		40-140	1		30
Benzo(a)pyrene	77		77		40-140	0		30
Benzo(b)fluoranthene	76		78		40-140	3		30
Benzo(k)fluoranthene	76		76		40-140	0		30
Chrysene	76		78		40-140	3		30
Acenaphthylene	65		64		45-123	2		30
Anthracene	70		71		40-140	1		30
Benzo(ghi)perylene	73		77		40-140	5		30
Fluorene	66		66		40-140	0		30
Phenanthrene	68		69		40-140	1		30
Dibenzo(a,h)anthracene	72		75		40-140	4		30
Indeno(1,2,3-cd)pyrene	72		74		40-140	3		30
Pyrene	65		69		26-127	6		30
Biphenyl	66		65		40-140	2		30
4-Chloroaniline	44		38	Q	40-140	15		30
2-Nitroaniline	70		71		52-143	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1193790-2 WG1193790-3								
3-Nitroaniline	47		50		25-145	6		30
4-Nitroaniline	59		60		51-143	2		30
Dibenzofuran	67		67		40-140	0		30
2-Methylnaphthalene	68		65		40-140	5		30
1,2,4,5-Tetrachlorobenzene	64		61		2-134	5		30
Acetophenone	71		70		39-129	1		30
2,4,6-Trichlorophenol	63		65		30-130	3		30
p-Chloro-m-cresol	70		70		23-97	0		30
2-Chlorophenol	66		63		27-123	5		30
2,4-Dichlorophenol	65		64		30-130	2		30
2,4-Dimethylphenol	36		29	Q	30-130	22		30
2-Nitrophenol	68		65		30-130	5		30
4-Nitrophenol	65		71		10-80	9		30
2,4-Dinitrophenol	79		82		20-130	4		30
4,6-Dinitro-o-cresol	70		71		20-164	1		30
Pentachlorophenol	67		76		9-103	13		30
Phenol	55		53		12-110	4		30
2-Methylphenol	63		59		30-130	7		30
3-Methylphenol/4-Methylphenol	66		63		30-130	5		30
2,4,5-Trichlorophenol	65		64		30-130	2		30
Benzoic Acid	65		66		10-164	2		30
Benzyl Alcohol	71		68		26-116	4		30
Carbazole	67		70		55-144	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1193790-2 WG1193790-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	61		59		21-120
Phenol-d6	53		53		10-120
Nitrobenzene-d5	72		70		23-120
2-Fluorobiphenyl	62		62		15-120
2,4,6-Tribromophenol	60		64		10-120
4-Terphenyl-d14	58		62		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG1194717-2 WG1194717-3								
Acenaphthene	82		87		40-140	6		40
2-Chloronaphthalene	80		83		40-140	4		40
Fluoranthene	99		99		40-140	0		40
Hexachlorobutadiene	73		79		40-140	8		40
Naphthalene	75		82		40-140	9		40
Benzo(a)anthracene	95		101		40-140	6		40
Benzo(a)pyrene	101		107		40-140	6		40
Benzo(b)fluoranthene	97		103		40-140	6		40
Benzo(k)fluoranthene	98		106		40-140	8		40
Chrysene	85		91		40-140	7		40
Acenaphthylene	92		96		40-140	4		40
Anthracene	91		96		40-140	5		40
Benzo(ghi)perylene	92		95		40-140	3		40
Fluorene	92		96		40-140	4		40
Phenanthrene	84		88		40-140	5		40
Dibenzo(a,h)anthracene	98		102		40-140	4		40
Indeno(1,2,3-cd)pyrene	99		103		40-140	4		40
Pyrene	100		100		40-140	0		40
2-Methylnaphthalene	79		84		40-140	6		40
Pentachlorophenol	99		106		40-140	7		40
Hexachlorobenzene	84		90		40-140	7		40
Hexachloroethane	72		81		40-140	12		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

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Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG1194717-2 WG1194717-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	66		68		21-120
Phenol-d6	56		58		10-120
Nitrobenzene-d5	90		96		23-120
2-Fluorobiphenyl	80		81		15-120
2,4,6-Tribromophenol	109		100		10-120
4-Terphenyl-d14	91		88		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193399-6 WG1193399-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
Acenaphthene	140J	2170	1300	60		1200	55		31-137	8		50
1,2,4-Trichlorobenzene	ND	2170	1500	69		1400	64		38-107	7		50
Hexachlorobenzene	ND	2170	1400	64		1300	59		40-140	7		50
Bis(2-chloroethyl)ether	ND	2170	1400	64		1300	59		40-140	7		50
2-Chloronaphthalene	ND	2170	1500	69		1400	64		40-140	7		50
1,2-Dichlorobenzene	ND	2170	1400	64		1300	59		40-140	7		50
1,3-Dichlorobenzene	ND	2170	1300	60		1300	59		40-140	0		50
1,4-Dichlorobenzene	ND	2170	1400	64		1300	59		28-104	7		50
3,3'-Dichlorobenzidine	ND	2170	1200	55		1200	55		40-140	0		50
2,4-Dinitrotoluene	ND	2170	1200	55		1200	55		40-132	0		50
2,6-Dinitrotoluene	ND	2170	1400	64		1400	64		40-140	0		50
Fluoranthene	270	2170	1500	57		1400	52		40-140	7		50
4-Chlorophenyl phenyl ether	ND	2170	1300	60		1200	55		40-140	8		50
4-Bromophenyl phenyl ether	ND	2170	1400	64		1300	59		40-140	7		50
Bis(2-chloroisopropyl)ether	ND	2170	1400	64		1300	59		40-140	7		50
Bis(2-chloroethoxy)methane	ND	2170	1500	69		1400	64		40-117	7		50
Hexachlorobutadiene	ND	2170	1500	69		1400	64		40-140	7		50
Hexachlorocyclopentadiene	ND	2170	980	45		920	42		40-140	6		50
Hexachloroethane	ND	2170	1300	60		1200	55		40-140	8		50
Isophorone	ND	2170	1500	69		1400	64		40-140	7		50
Naphthalene	230J	2170	1500	69		1400	64		40-140	7		50
Nitrobenzene	ND	2170	1400	64		1300	59		40-140	7		50
NDPA/DPA	ND	2170	1300	60		1200	55		36-157	8		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193399-6 WG1193399-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
n-Nitrosodi-n-propylamine	ND	2170	1500	69		1400	64		32-121	7		50
Bis(2-ethylhexyl)phthalate	ND	2170	1400	64		1300	59		40-140	7		50
Butyl benzyl phthalate	ND	2170	1400	64		1300	59		40-140	7		50
Di-n-butylphthalate	ND	2170	1400	64		1400	64		40-140	0		50
Di-n-octylphthalate	ND	2170	1400	64		1300	59		40-140	7		50
Diethyl phthalate	ND	2170	1200	55		1200	55		40-140	0		50
Dimethyl phthalate	ND	2170	1600	74		1500	69		40-140	6		50
Benzo(a)anthracene	130J	2170	1300	60		1300	59		40-140	0		50
Benzo(a)pyrene	120J	2170	1400	64		1300	59		40-140	7		50
Benzo(b)fluoranthene	110J	2170	1300	60		1300	59		40-140	0		50
Benzo(k)fluoranthene	ND	2170	1400	64		1400	64		40-140	0		50
Chrysene	120J	2170	1300	60		1300	59		40-140	0		50
Acenaphthylene	96J	2170	1600	74		1500	69		40-140	6		50
Anthracene	74J	2170	1400	64		1300	59		40-140	7		50
Benzo(ghi)perylene	73J	2170	1300	60		1300	59		40-140	0		50
Fluorene	56J	2170	1300	60		1200	55		40-140	8		50
Phenanthrene	160	2170	1400	64		1300	59		40-140	7		50
Dibenzo(a,h)anthracene	ND	2170	1400	64		1300	59		40-140	7		50
Indeno(1,2,3-cd)pyrene	55J	2170	1300	60		1300	59		40-140	0		50
Pyrene	390	2170	1500	51		1400	46		35-142	7		50
Biphenyl	ND	2170	1500	69		1400	64		54-104	7		50
4-Chloroaniline	ND	2170	930	43		930	43		40-140	0		50
2-Nitroaniline	ND	2170	1600	74		1500	69		47-134	6		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193399-6 WG1193399-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
3-Nitroaniline	ND	2170	940	43		940	43		26-129	0		50
4-Nitroaniline	ND	2170	1200	55		1100	50		41-125	9		50
Dibenzofuran	29J	2170	1200	55		1200	55		40-140	0		50
2-Methylnaphthalene	38J	2170	1500	69		1400	64		40-140	7		50
1,2,4,5-Tetrachlorobenzene	ND	2170	1600	74		1500	69		40-117	6		50
Acetophenone	ND	2170	1500	69		1400	64		14-144	7		50
2,4,6-Trichlorophenol	ND	2170	1600	74		1500	69		30-130	6		50
p-Chloro-m-cresol	ND	2170	1600	74		1500	69		26-103	6		50
2-Chlorophenol	ND	2170	1500	69		1400	64		25-102	7		50
2,4-Dichlorophenol	ND	2170	1700	78		1500	69		30-130	13		50
2,4-Dimethylphenol	ND	2170	1700	78		1500	69		30-130	13		50
2-Nitrophenol	ND	2170	1400	64		1300	59		30-130	7		50
4-Nitrophenol	ND	2170	1000	46		910	42		11-114	9		50
2,4-Dinitrophenol	ND	2170	ND	0	Q	ND	0	Q	4-130	NC		50
4,6-Dinitro-o-cresol	ND	2170	200J	9	Q	140J	6	Q	10-130	35		50
Pentachlorophenol	ND	2170	1300	60		1200	55		17-109	8		50
Phenol	ND	2170	1400	64		1400	64		26-90	0		50
2-Methylphenol	ND	2170	1500	69		1400	64		30-130	7		50
3-Methylphenol/4-Methylphenol	ND	2170	1500	69		1400	64		30-130	7		50
2,4,5-Trichlorophenol	ND	2170	1700	78		1500	69		30-130	13		50
Benzoic Acid	ND	2170	ND	0	Q	ND	0	Q	10-110	NC		50
Benzyl Alcohol	ND	2170	1600	74		1400	64		40-140	13		50
Carbazole	ND	2170	1400	64		1300	59		54-128	7		50

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193399-6 WG1193399-7 QC Sample: L1853234-03 Client ID: RB01_25-27

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	69		62		10-136
2-Fluorobiphenyl	71		68		30-120
2-Fluorophenol	65		60		25-120
4-Terphenyl-d14	66		62		18-120
Nitrobenzene-d5	64		61		23-120
Phenol-d6	68		64		10-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 19:44
 Analyst: WR
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.5	3.42	1	A
Aroclor 1221	ND		ug/kg	38.5	3.86	1	A
Aroclor 1232	ND		ug/kg	38.5	8.17	1	A
Aroclor 1242	ND		ug/kg	38.5	5.20	1	A
Aroclor 1248	ND		ug/kg	38.5	5.78	1	A
Aroclor 1254	ND		ug/kg	38.5	4.22	1	A
Aroclor 1260	ND		ug/kg	38.5	7.12	1	A
Aroclor 1262	ND		ug/kg	38.5	4.90	1	A
Aroclor 1268	ND		ug/kg	38.5	3.99	1	A
PCBs, Total	ND		ug/kg	38.5	3.42	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 19:56
 Analyst: WR
 Percent Solids: 63%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	51.1	4.54	1	A
Aroclor 1221	ND		ug/kg	51.1	5.12	1	A
Aroclor 1232	ND		ug/kg	51.1	10.8	1	A
Aroclor 1242	ND		ug/kg	51.1	6.89	1	A
Aroclor 1248	ND		ug/kg	51.1	7.67	1	A
Aroclor 1254	ND		ug/kg	51.1	5.59	1	A
Aroclor 1260	ND		ug/kg	51.1	9.45	1	A
Aroclor 1262	ND		ug/kg	51.1	6.49	1	A
Aroclor 1268	ND		ug/kg	51.1	5.30	1	A
PCBs, Total	ND		ug/kg	51.1	4.54	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	44		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	47		30-150	B
Decachlorobiphenyl	47		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 20:09
 Analyst: WR
 Percent Solids: 60%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	54.3	4.82	1	A
Aroclor 1221	ND		ug/kg	54.3	5.44	1	A
Aroclor 1232	ND		ug/kg	54.3	11.5	1	A
Aroclor 1242	ND		ug/kg	54.3	7.32	1	A
Aroclor 1248	ND		ug/kg	54.3	8.14	1	A
Aroclor 1254	ND		ug/kg	54.3	5.94	1	A
Aroclor 1260	ND		ug/kg	54.3	10.0	1	A
Aroclor 1262	ND		ug/kg	54.3	6.89	1	A
Aroclor 1268	ND		ug/kg	54.3	5.62	1	A
PCBs, Total	ND		ug/kg	54.3	4.82	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
Client ID: RB08_0-2
Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/02/19 20:46
Analyst: WR
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 12/28/18 08:40
Cleanup Method: EPA 3665A
Cleanup Date: 12/28/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.1	3.21	1	A
Aroclor 1221	ND		ug/kg	36.1	3.62	1	A
Aroclor 1232	ND		ug/kg	36.1	7.66	1	A
Aroclor 1242	ND		ug/kg	36.1	4.87	1	A
Aroclor 1248	ND		ug/kg	36.1	5.42	1	A
Aroclor 1254	ND		ug/kg	36.1	3.95	1	A
Aroclor 1260	40.7		ug/kg	36.1	6.68	1	B
Aroclor 1262	ND		ug/kg	36.1	4.59	1	A
Aroclor 1268	ND		ug/kg	36.1	3.74	1	A
PCBs, Total	40.7		ug/kg	36.1	3.21	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 20:59
 Analyst: WR
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.5	3.33	1	A
Aroclor 1221	ND		ug/kg	37.5	3.76	1	A
Aroclor 1232	ND		ug/kg	37.5	7.95	1	A
Aroclor 1242	ND		ug/kg	37.5	5.05	1	A
Aroclor 1248	ND		ug/kg	37.5	5.62	1	A
Aroclor 1254	ND		ug/kg	37.5	4.10	1	A
Aroclor 1260	ND		ug/kg	37.5	6.93	1	A
Aroclor 1262	ND		ug/kg	37.5	4.76	1	A
Aroclor 1268	ND		ug/kg	37.5	3.88	1	A
PCBs, Total	ND		ug/kg	37.5	3.33	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 21:11
 Analyst: WR
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.6	3.34	1	A
Aroclor 1221	ND		ug/kg	37.6	3.77	1	A
Aroclor 1232	ND		ug/kg	37.6	7.98	1	A
Aroclor 1242	ND		ug/kg	37.6	5.07	1	A
Aroclor 1248	ND		ug/kg	37.6	5.65	1	A
Aroclor 1254	ND		ug/kg	37.6	4.12	1	A
Aroclor 1260	ND		ug/kg	37.6	6.96	1	A
Aroclor 1262	ND		ug/kg	37.6	4.78	1	A
Aroclor 1268	ND		ug/kg	37.6	3.90	1	A
PCBs, Total	ND		ug/kg	37.6	3.34	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	44		30-150	A
Decachlorobiphenyl	36		30-150	A
2,4,5,6-Tetrachloro-m-xylene	45		30-150	B
Decachlorobiphenyl	41		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 21:24
 Analyst: WR
 Percent Solids: 68%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	47.4	4.21	1	A
Aroclor 1221	ND		ug/kg	47.4	4.75	1	A
Aroclor 1232	ND		ug/kg	47.4	10.0	1	A
Aroclor 1242	ND		ug/kg	47.4	6.39	1	A
Aroclor 1248	ND		ug/kg	47.4	7.11	1	A
Aroclor 1254	ND		ug/kg	47.4	5.18	1	A
Aroclor 1260	ND		ug/kg	47.4	8.76	1	A
Aroclor 1262	ND		ug/kg	47.4	6.02	1	A
Aroclor 1268	ND		ug/kg	47.4	4.91	1	A
PCBs, Total	ND		ug/kg	47.4	4.21	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 21:36
 Analyst: WR
 Percent Solids: 72%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	44.6	3.96	1	A
Aroclor 1221	ND		ug/kg	44.6	4.47	1	A
Aroclor 1232	ND		ug/kg	44.6	9.46	1	A
Aroclor 1242	ND		ug/kg	44.6	6.01	1	A
Aroclor 1248	ND		ug/kg	44.6	6.69	1	A
Aroclor 1254	ND		ug/kg	44.6	4.88	1	A
Aroclor 1260	ND		ug/kg	44.6	8.24	1	A
Aroclor 1262	ND		ug/kg	44.6	5.67	1	A
Aroclor 1268	ND		ug/kg	44.6	4.62	1	A
PCBs, Total	ND		ug/kg	44.6	3.96	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 22:22
 Analyst: WR
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.2	3.39	1	A
Aroclor 1221	ND		ug/kg	38.2	3.83	1	A
Aroclor 1232	ND		ug/kg	38.2	8.10	1	A
Aroclor 1242	ND		ug/kg	38.2	5.15	1	A
Aroclor 1248	ND		ug/kg	38.2	5.73	1	A
Aroclor 1254	ND		ug/kg	38.2	4.18	1	A
Aroclor 1260	ND		ug/kg	38.2	7.06	1	A
Aroclor 1262	ND		ug/kg	38.2	4.85	1	A
Aroclor 1268	ND		ug/kg	38.2	3.96	1	A
PCBs, Total	ND		ug/kg	38.2	3.39	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 12/30/18 22:05
 Analyst: AWS

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 07:15
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/30/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/30/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 12/30/18 23:40
 Analyst: WR

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-09 Batch: WG1193423-1						
Aroclor 1016	ND		ug/kg	31.6	2.80	A
Aroclor 1221	ND		ug/kg	31.6	3.16	A
Aroclor 1232	ND		ug/kg	31.6	6.69	A
Aroclor 1242	ND		ug/kg	31.6	4.26	A
Aroclor 1248	ND		ug/kg	31.6	4.73	A
Aroclor 1254	ND		ug/kg	31.6	3.45	A
Aroclor 1260	ND		ug/kg	31.6	5.83	A
Aroclor 1262	ND		ug/kg	31.6	4.01	A
Aroclor 1268	ND		ug/kg	31.6	3.27	A
PCBs, Total	ND		ug/kg	31.6	2.80	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 12/30/18 22:19
 Analyst: AWS

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 07:15
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/30/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/30/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 11 Batch: WG1193825-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	85		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1193423-2 WG1193423-3									
Aroclor 1016	65		71		40-140	9		50	A
Aroclor 1260	54		59		40-140	9		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		73		30-150	A
Decachlorobiphenyl	61		64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		73		30-150	B
Decachlorobiphenyl	64		66		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 11 Batch: WG1193825-2 WG1193825-3									
Aroclor 1016	74		72		40-140	2		50	A
Aroclor 1260	76		77		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		78		30-150	A
Decachlorobiphenyl	80		81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		82		30-150	B
Decachlorobiphenyl	86		87		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193423-4 WG1193423-5 QC Sample: L1853234-03 Client ID: RB01_25-27													
Aroclor 1016	ND	335	303	91		337	101		40-140	11		50	A
Aroclor 1260	ND	335	194	58		185	56		40-140	5		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		51		30-150	A
Decachlorobiphenyl	53		55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		60		30-150	B
Decachlorobiphenyl	57		60		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 11:22
 Analyst: BM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.90	0.371	1	A
Lindane	ND		ug/kg	0.790	0.353	1	A
Alpha-BHC	ND		ug/kg	0.790	0.224	1	A
Beta-BHC	ND		ug/kg	1.90	0.719	1	A
Heptachlor	ND		ug/kg	0.948	0.425	1	A
Aldrin	ND		ug/kg	1.90	0.668	1	A
Heptachlor epoxide	ND		ug/kg	3.56	1.07	1	A
Endrin	ND		ug/kg	0.790	0.324	1	A
Endrin aldehyde	ND		ug/kg	2.37	0.830	1	A
Endrin ketone	ND		ug/kg	1.90	0.488	1	A
Dieldrin	ND		ug/kg	1.18	0.593	1	A
4,4'-DDE	ND		ug/kg	1.90	0.438	1	A
4,4'-DDD	ND		ug/kg	1.90	0.676	1	A
4,4'-DDT	ND		ug/kg	3.56	1.52	1	A
Endosulfan I	ND		ug/kg	1.90	0.448	1	A
Endosulfan II	1.69	JIP	ug/kg	1.90	0.634	1	A
Endosulfan sulfate	ND		ug/kg	0.790	0.376	1	A
Methoxychlor	ND		ug/kg	3.56	1.11	1	A
Toxaphene	ND		ug/kg	35.6	9.96	1	A
cis-Chlordane	ND		ug/kg	2.37	0.661	1	A
trans-Chlordane	ND		ug/kg	2.37	0.626	1	A
Chlordane	ND		ug/kg	15.4	6.28	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	102		30-150	B
2,4,5,6-Tetrachloro-m-xylene	183	Q	30-150	A
Decachlorobiphenyl	114		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 02:56
 Analyst: DGM
 Percent Solids: 83%
 Methylation Date: 12/29/18 17:43

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	199	12.5	1	B
2,4,5-T	ND		ug/kg	199	6.16	1	B
2,4,5-TP (Silvex)	ND		ug/kg	199	5.29	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	131		30-150	A
DCAA	122		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 03:14
 Analyst: DGM
 Percent Solids: 63%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	264	16.6	1	B
2,4,5-T	ND		ug/kg	264	8.18	1	B
2,4,5-TP (Silvex)	ND		ug/kg	264	7.02	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	124		30-150	A
DCAA	109		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02 D
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 11:11
 Analyst: KEG
 Percent Solids: 63%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	24.5	4.81	10	A
Lindane	ND		ug/kg	10.2	4.57	10	A
Alpha-BHC	ND		ug/kg	10.2	2.90	10	A
Beta-BHC	ND		ug/kg	24.5	9.31	10	A
Heptachlor	ND		ug/kg	12.3	5.50	10	A
Aldrin	ND		ug/kg	24.5	8.64	10	A
Heptachlor epoxide	ND		ug/kg	46.0	13.8	10	A
Endrin	ND		ug/kg	10.2	4.19	10	A
Endrin aldehyde	ND		ug/kg	30.7	10.7	10	A
Endrin ketone	ND		ug/kg	24.5	6.32	10	A
Dieldrin	ND	IP	ug/kg	15.3	7.67	10	A
4,4'-DDE	ND		ug/kg	24.5	5.68	10	A
4,4'-DDD	ND		ug/kg	24.5	8.75	10	A
4,4'-DDT	ND		ug/kg	46.0	19.7	10	A
Endosulfan I	ND		ug/kg	24.5	5.80	10	A
Endosulfan II	ND		ug/kg	24.5	8.20	10	A
Endosulfan sulfate	ND		ug/kg	10.2	4.87	10	A
Methoxychlor	ND		ug/kg	46.0	14.3	10	A
Toxaphene	ND		ug/kg	460	129.	10	A
cis-Chlordane	ND		ug/kg	30.7	8.55	10	A
trans-Chlordane	ND		ug/kg	30.7	8.10	10	A
Chlordane	ND		ug/kg	199	81.3	10	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-02 D

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	130		30-150	B
2,4,5,6-Tetrachloro-m-xylene	7680	Q	30-150	A
Decachlorobiphenyl	242	Q	30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/29/18 15:14
 Analyst: BM
 Percent Solids: 60%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.50	0.490	1	A
Lindane	ND		ug/kg	1.04	0.466	1	A
Alpha-BHC	ND		ug/kg	1.04	0.296	1	A
Beta-BHC	ND		ug/kg	2.50	0.948	1	A
Heptachlor	ND		ug/kg	1.25	0.560	1	A
Aldrin	ND		ug/kg	2.50	0.880	1	A
Heptachlor epoxide	ND		ug/kg	4.69	1.41	1	A
Endrin	ND		ug/kg	1.04	0.427	1	A
Endrin aldehyde	ND		ug/kg	3.12	1.09	1	A
Endrin ketone	ND		ug/kg	2.50	0.644	1	A
Dieldrin	ND		ug/kg	1.56	0.781	1	A
4,4'-DDE	ND		ug/kg	2.50	0.578	1	A
4,4'-DDD	ND		ug/kg	2.50	0.892	1	A
4,4'-DDT	2.79	J	ug/kg	4.69	2.01	1	A
Endosulfan I	ND		ug/kg	2.50	0.591	1	A
Endosulfan II	ND		ug/kg	2.50	0.835	1	A
Endosulfan sulfate	ND		ug/kg	1.04	0.496	1	A
Methoxychlor	ND		ug/kg	4.69	1.46	1	A
Toxaphene	ND		ug/kg	46.9	13.1	1	A
cis-Chlordane	ND		ug/kg	3.12	0.871	1	A
trans-Chlordane	ND		ug/kg	3.12	0.825	1	A
Chlordane	ND		ug/kg	20.3	8.28	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	73		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1270	Q	30-150	A
Decachlorobiphenyl	60		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 01:59
 Analyst: DGM
 Percent Solids: 60%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	272	17.1	1	B
2,4,5-T	ND		ug/kg	272	8.42	1	B
2,4,5-TP (Silvex)	ND		ug/kg	272	7.23	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	122		30-150	A
DCAA	102		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 11:48
 Analyst: BM
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.348	1	A
Lindane	ND		ug/kg	0.740	0.331	1	A
Alpha-BHC	ND		ug/kg	0.740	0.210	1	A
Beta-BHC	ND		ug/kg	1.78	0.673	1	A
Heptachlor	ND		ug/kg	0.888	0.398	1	A
Aldrin	ND		ug/kg	1.78	0.625	1	A
Heptachlor epoxide	ND		ug/kg	3.33	0.999	1	A
Endrin	ND		ug/kg	0.740	0.303	1	A
Endrin aldehyde	ND		ug/kg	2.22	0.777	1	A
Endrin ketone	ND		ug/kg	1.78	0.457	1	A
Dieldrin	ND		ug/kg	1.11	0.555	1	A
4,4'-DDE	2.06	IP	ug/kg	1.78	0.411	1	A
4,4'-DDD	ND		ug/kg	1.78	0.633	1	A
4,4'-DDT	13.3	IP	ug/kg	3.33	1.43	1	A
Endosulfan I	ND		ug/kg	1.78	0.420	1	A
Endosulfan II	ND		ug/kg	1.78	0.593	1	A
Endosulfan sulfate	ND		ug/kg	0.740	0.352	1	A
Methoxychlor	ND		ug/kg	3.33	1.04	1	A
Toxaphene	ND		ug/kg	33.3	9.32	1	A
cis-Chlordane	2.38	IP	ug/kg	2.22	0.618	1	B
trans-Chlordane	ND		ug/kg	2.22	0.586	1	A
Chlordane	ND		ug/kg	14.4	5.88	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	110		30-150	B
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	75		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 03:33
 Analyst: DGM
 Percent Solids: 88%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	B
2,4,5-T	ND		ug/kg	184	5.71	1	B
2,4,5-TP (Silvex)	ND		ug/kg	184	4.90	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	123		30-150	A
DCAA	117		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 12:00
 Analyst: BM
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.342	1	A
Lindane	ND		ug/kg	0.727	0.325	1	A
Alpha-BHC	ND		ug/kg	0.727	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.662	1	A
Heptachlor	ND		ug/kg	0.872	0.391	1	A
Aldrin	ND		ug/kg	1.74	0.614	1	A
Heptachlor epoxide	ND		ug/kg	3.27	0.982	1	A
Endrin	ND		ug/kg	0.727	0.298	1	A
Endrin aldehyde	ND		ug/kg	2.18	0.763	1	A
Endrin ketone	ND		ug/kg	1.74	0.449	1	A
Dieldrin	ND		ug/kg	1.09	0.545	1	A
4,4'-DDE	ND		ug/kg	1.74	0.404	1	A
4,4'-DDD	ND		ug/kg	1.74	0.622	1	A
4,4'-DDT	3.66		ug/kg	3.27	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.412	1	A
Endosulfan II	ND		ug/kg	1.74	0.583	1	A
Endosulfan sulfate	ND		ug/kg	0.727	0.346	1	A
Methoxychlor	ND		ug/kg	3.27	1.02	1	A
Toxaphene	ND		ug/kg	32.7	9.16	1	A
cis-Chlordane	ND		ug/kg	2.18	0.608	1	A
trans-Chlordane	ND		ug/kg	2.18	0.576	1	A
Chlordane	ND		ug/kg	14.2	5.78	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 03:52
 Analyst: DGM
 Percent Solids: 87%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	188	11.8	1	B
2,4,5-T	ND		ug/kg	188	5.81	1	B
2,4,5-TP (Silvex)	ND		ug/kg	188	4.99	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	137		30-150	A
DCAA	110		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 12:13
 Analyst: BM
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.360	1	A
Lindane	ND		ug/kg	0.765	0.342	1	A
Alpha-BHC	ND		ug/kg	0.765	0.217	1	A
Beta-BHC	ND		ug/kg	1.84	0.696	1	A
Heptachlor	ND		ug/kg	0.918	0.412	1	A
Aldrin	ND		ug/kg	1.84	0.646	1	A
Heptachlor epoxide	ND		ug/kg	3.44	1.03	1	A
Endrin	ND		ug/kg	0.765	0.314	1	A
Endrin aldehyde	ND		ug/kg	2.29	0.803	1	A
Endrin ketone	ND		ug/kg	1.84	0.473	1	A
Dieldrin	ND		ug/kg	1.15	0.574	1	A
4,4'-DDE	ND		ug/kg	1.84	0.424	1	A
4,4'-DDD	ND		ug/kg	1.84	0.655	1	A
4,4'-DDT	ND		ug/kg	3.44	1.48	1	A
Endosulfan I	ND		ug/kg	1.84	0.434	1	A
Endosulfan II	ND		ug/kg	1.84	0.613	1	A
Endosulfan sulfate	ND		ug/kg	0.765	0.364	1	A
Methoxychlor	ND		ug/kg	3.44	1.07	1	A
Toxaphene	ND		ug/kg	34.4	9.64	1	A
cis-Chlordane	ND		ug/kg	2.29	0.639	1	A
trans-Chlordane	ND		ug/kg	2.29	0.606	1	A
Chlordane	ND		ug/kg	14.9	6.08	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	43		30-150	B
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	64		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 04:11
 Analyst: DGM
 Percent Solids: 84%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	196	12.4	1	B
2,4,5-T	ND		ug/kg	196	6.08	1	B
2,4,5-TP (Silvex)	ND		ug/kg	196	5.22	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	86		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 12:26
 Analyst: BM
 Percent Solids: 68%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.23	0.436	1	A
Lindane	ND		ug/kg	0.928	0.415	1	A
Alpha-BHC	ND		ug/kg	0.928	0.264	1	A
Beta-BHC	ND		ug/kg	2.23	0.845	1	A
Heptachlor	ND		ug/kg	1.11	0.499	1	A
Aldrin	ND		ug/kg	2.23	0.784	1	A
Heptachlor epoxide	ND		ug/kg	4.18	1.25	1	A
Endrin	ND		ug/kg	0.928	0.380	1	A
Endrin aldehyde	ND		ug/kg	2.78	0.975	1	A
Endrin ketone	ND		ug/kg	2.23	0.574	1	A
Dieldrin	ND		ug/kg	1.39	0.696	1	A
4,4'-DDE	ND		ug/kg	2.23	0.515	1	A
4,4'-DDD	ND		ug/kg	2.23	0.794	1	A
4,4'-DDT	ND		ug/kg	4.18	1.79	1	A
Endosulfan I	ND		ug/kg	2.23	0.526	1	A
Endosulfan II	ND		ug/kg	2.23	0.744	1	A
Endosulfan sulfate	ND		ug/kg	0.928	0.442	1	A
Methoxychlor	ND		ug/kg	4.18	1.30	1	A
Toxaphene	ND		ug/kg	41.8	11.7	1	A
cis-Chlordane	ND		ug/kg	2.78	0.776	1	A
trans-Chlordane	ND		ug/kg	2.78	0.735	1	A
Chlordane	ND		ug/kg	18.1	7.38	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	64		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1610	Q	30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 04:30
 Analyst: DGM
 Percent Solids: 68%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	244	15.3	1	B
2,4,5-T	ND		ug/kg	244	7.55	1	B
2,4,5-TP (Silvex)	ND		ug/kg	244	6.48	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
Client ID: SODUP02_122718
Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 01/02/19 12:39
Analyst: BM
Percent Solids: 72%

Extraction Method: EPA 3546
Extraction Date: 12/28/18 10:00
Cleanup Method: EPA 3620B
Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.17	0.425	1	A
Lindane	ND		ug/kg	0.903	0.404	1	A
Alpha-BHC	ND		ug/kg	0.903	0.256	1	A
Beta-BHC	ND		ug/kg	2.17	0.822	1	A
Heptachlor	ND		ug/kg	1.08	0.486	1	A
Aldrin	ND		ug/kg	2.17	0.763	1	A
Heptachlor epoxide	ND		ug/kg	4.06	1.22	1	A
Endrin	ND		ug/kg	0.903	0.370	1	A
Endrin aldehyde	ND		ug/kg	2.71	0.948	1	A
Endrin ketone	ND		ug/kg	2.17	0.558	1	A
Dieldrin	ND		ug/kg	1.36	0.678	1	A
4,4'-DDE	ND		ug/kg	2.17	0.501	1	A
4,4'-DDD	ND		ug/kg	2.17	0.773	1	A
4,4'-DDT	ND		ug/kg	4.06	1.74	1	A
Endosulfan I	ND		ug/kg	2.17	0.512	1	A
Endosulfan II	ND		ug/kg	2.17	0.724	1	A
Endosulfan sulfate	ND		ug/kg	0.903	0.430	1	A
Methoxychlor	ND		ug/kg	4.06	1.26	1	A
Toxaphene	ND		ug/kg	40.6	11.4	1	A
cis-Chlordane	ND		ug/kg	2.71	0.755	1	A
trans-Chlordane	ND		ug/kg	2.71	0.716	1	A
Chlordane	ND		ug/kg	17.6	7.18	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	47		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1270	Q	30-150	A
Decachlorobiphenyl	58		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 04:49
 Analyst: DGM
 Percent Solids: 72%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	228	14.4	1	B
2,4,5-T	ND		ug/kg	228	7.07	1	B
2,4,5-TP (Silvex)	ND		ug/kg	228	6.06	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 05:26
 Analyst: DGM
 Percent Solids: 87%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	187	11.8	1	B
2,4,5-T	ND		ug/kg	187	5.80	1	B
2,4,5-TP (Silvex)	ND		ug/kg	187	4.97	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	44		30-150	A
DCAA	11	Q	30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09 D
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 11:23
 Analyst: KEG
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	34.8	6.81	20	A
Lindane	ND		ug/kg	14.5	6.48	20	A
Alpha-BHC	ND		ug/kg	14.5	4.12	20	A
Beta-BHC	ND		ug/kg	34.8	13.2	20	A
Heptachlor	ND		ug/kg	17.4	7.80	20	A
Aldrin	ND		ug/kg	34.8	12.2	20	A
Heptachlor epoxide	ND		ug/kg	65.2	19.6	20	A
Endrin	ND		ug/kg	14.5	5.94	20	A
Endrin aldehyde	ND		ug/kg	43.5	15.2	20	A
Endrin ketone	ND		ug/kg	34.8	8.96	20	A
Dieldrin	ND		ug/kg	21.7	10.9	20	A
4,4'-DDE	ND		ug/kg	34.8	8.05	20	A
4,4'-DDD	ND		ug/kg	34.8	12.4	20	A
4,4'-DDT	ND		ug/kg	65.2	28.0	20	A
Endosulfan I	ND		ug/kg	34.8	8.22	20	A
Endosulfan II	ND		ug/kg	34.8	11.6	20	A
Endosulfan sulfate	ND		ug/kg	14.5	6.90	20	A
Methoxychlor	ND		ug/kg	65.2	20.3	20	A
Toxaphene	ND		ug/kg	652	183.	20	A
cis-Chlordane	ND		ug/kg	43.5	12.1	20	A
trans-Chlordane	ND		ug/kg	43.5	11.5	20	A
Chlordane	ND		ug/kg	283	115.	20	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09 D
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
Client ID: SOFB02_122718
Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 12/30/18 18:13
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-11

Date Collected: 12/27/18 10:45

Client ID: SOFB02_122718

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 00:25
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:07

Methylation Date: 12/29/18 17:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	103		30-150	A
DCAA	85		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/02/19 12:35
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 15:31

Methylation Date: 12/28/18 08:56

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 11 Batch: WG1193192-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	116		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/29/18 14:10
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 12/28/18 10:00
Cleanup Method: EPA 3620B
Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1193469-1						
Delta-BHC	ND		ug/kg	1.58	0.310	A
Lindane	ND		ug/kg	0.659	0.294	A
Alpha-BHC	ND		ug/kg	0.659	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.599	A
Heptachlor	ND		ug/kg	0.790	0.354	A
Aldrin	ND		ug/kg	1.58	0.557	A
Heptachlor epoxide	ND		ug/kg	2.96	0.889	A
Endrin	ND		ug/kg	0.659	0.270	A
Endrin aldehyde	ND		ug/kg	1.98	0.692	A
Endrin ketone	ND		ug/kg	1.58	0.407	A
Dieldrin	ND		ug/kg	0.988	0.494	A
4,4'-DDE	ND		ug/kg	1.58	0.366	A
4,4'-DDD	ND		ug/kg	1.58	0.564	A
4,4'-DDT	ND		ug/kg	2.96	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.374	A
Endosulfan II	ND		ug/kg	1.58	0.528	A
Endosulfan sulfate	ND		ug/kg	0.659	0.314	A
Methoxychlor	ND		ug/kg	2.96	0.922	A
Toxaphene	ND		ug/kg	29.6	8.30	A
cis-Chlordane	ND		ug/kg	1.98	0.551	A
trans-Chlordane	ND		ug/kg	1.98	0.522	A
Chlordane	ND		ug/kg	12.8	5.24	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 12/29/18 14:10
 Analyst: BM

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1193469-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	85		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	78		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 12/31/18 00:44
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Methylation Date: 12/29/18 17:43

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1193627-1						
2,4-D	ND		ug/kg	164	10.3	B
2,4,5-T	ND		ug/kg	164	5.08	B
2,4,5-TP (Silvex)	ND		ug/kg	164	4.36	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	107		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
Analytical Date: 12/30/18 17:22
Analyst: KEG

Extraction Method: EPA 3510C
Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG1193824-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A
4,4'-DDT	0.025	JIP	ug/l	0.029	0.003	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 12/30/18 17:22
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG1193824-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	61		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1193192-2 WG1193192-3									
2,4-D	104		103		30-150	1		25	A
2,4,5-T	107		111		30-150	4		25	A
2,4,5-TP (Silvex)	101		100		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	115		115		30-150	A
DCAA	104		122		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1193469-2 WG1193469-3									
Delta-BHC	92		82		30-150	11		30	A
Lindane	94		85		30-150	10		30	A
Alpha-BHC	99		90		30-150	10		30	A
Beta-BHC	98		84		30-150	15		30	A
Heptachlor	94		84		30-150	11		30	A
Aldrin	89		81		30-150	9		30	A
Heptachlor epoxide	91		83		30-150	9		30	A
Endrin	98		88		30-150	11		30	A
Endrin aldehyde	83		65		30-150	24		30	A
Endrin ketone	96		77		30-150	22		30	A
Dieldrin	106		95		30-150	11		30	A
4,4'-DDE	91		82		30-150	10		30	A
4,4'-DDD	97		87		30-150	11		30	A
4,4'-DDT	102		92		30-150	10		30	A
Endosulfan I	88		80		30-150	10		30	A
Endosulfan II	94		81		30-150	15		30	A
Endosulfan sulfate	75		59		30-150	24		30	A
Methoxychlor	107		94		30-150	13		30	A
cis-Chlordane	78		71		30-150	9		30	A
trans-Chlordane	79		76		30-150	4		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1193469-2 WG1193469-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	83		78		30-150	B
Decachlorobiphenyl	89		87		30-150	B
2,4,5,6-Tetrachloro-m-xylene	76		68		30-150	A
Decachlorobiphenyl	81		81		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1193627-2 WG1193627-3									
2,4-D	106		91		30-150	15		30	B
2,4,5-T	116		107		30-150	8		30	B
2,4,5-TP (Silvex)	99		91		30-150	8		30	B

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	122		112		30-150	A
DCAA	96		84		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1193824-2 WG1193824-3									
Delta-BHC	79		83		30-150	5		20	A
Lindane	78		83		30-150	6		20	A
Alpha-BHC	82		86		30-150	5		20	A
Beta-BHC	72		80		30-150	10		20	A
Heptachlor	72		76		30-150	6		20	A
Aldrin	76		80		30-150	5		20	A
Heptachlor epoxide	77		83		30-150	7		20	A
Endrin	78		82		30-150	6		20	A
Endrin aldehyde	74		78		30-150	5		20	A
Endrin ketone	79		82		30-150	4		20	A
Dieldrin	83		88		30-150	5		20	A
4,4'-DDE	76		82		30-150	7		20	A
4,4'-DDD	76		81		30-150	6		20	A
4,4'-DDT	78		84		30-150	8		20	A
Endosulfan I	74		78		30-150	6		20	A
Endosulfan II	73		77		30-150	5		20	A
Endosulfan sulfate	69		73		30-150	6		20	A
Methoxychlor	87		90		30-150	4		20	A
cis-Chlordane	66		67		30-150	0		20	A
trans-Chlordane	73		78		30-150	6		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1193824-2 WG1193824-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	64		67		30-150	A
Decachlorobiphenyl	38		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		74		30-150	B
Decachlorobiphenyl	42		41		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab ID: RB01_25-27 Associated sample(s): 01-09 QC Batch ID: WG1193469-4 WG1193469-5 QC Sample: L1853234-03 Client													
Delta-BHC	ND	52.8	31.9	60		41.8	78		30-150	27		50	A
Lindane	ND	52.8	31.2	59		40.1	75		30-150	25		50	A
Alpha-BHC	ND	52.8	40.2	76		45.1	84		30-150	11		50	A
Beta-BHC	ND	52.8	21.8	41		34.7	65		30-150	46		50	A
Heptachlor	ND	52.8	43.2P	82		45.4	85		30-150	5		50	A
Aldrin	ND	52.8	43.0	81		50.0	93		30-150	15		50	A
Heptachlor epoxide	ND	52.8	33.2	63		41.8	78		30-150	23		50	A
Endrin	ND	52.8	43.7	83		52.9	98		30-150	19		50	A
Endrin aldehyde	ND	52.8	28.5	54		31.3	58		30-150	9		50	A
Endrin ketone	ND	52.8	32.3	61		36.4	68		30-150	12		50	A
Dieldrin	ND	52.8	44.6	84		49.0	91		30-150	9		50	A
4,4'-DDE	ND	52.8	25.7	49		35.4	66		30-150	32		50	A
4,4'-DDD	ND	52.8	40.5	77		45.6	85		30-150	12		50	A
4,4'-DDT	2.79J	52.8	34.8	66		40.7	76		30-150	16		50	A
Endosulfan I	ND	52.8	33.2	63		40.7	76		30-150	20		50	A
Endosulfan II	ND	52.8	35.3	67		43.5	81		30-150	21		50	A
Endosulfan sulfate	ND	52.8	21.6	41		31.2	58		30-150	36		50	A
Methoxychlor	ND	52.8	44.7	85		44.0	82		30-150	2		50	A
cis-Chlordane	ND	52.8	28.3	54		36.8	69		30-150	26		50	A
trans-Chlordane	ND	52.8	28.9	55		36.0	67		30-150	22		50	A

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193469-4 WG1193469-5 QC Sample: L1853234-03 Client ID: RB01_25-27

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	56		65		30-150	B
Decachlorobiphenyl	61		72		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1472	Q	2746	Q	30-150	A
Decachlorobiphenyl	73		64		30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193627-4 WG1193627-5 QC Sample: L1853234-03 Client ID: RB01_25-27													
2,4-D	ND	272	291	107		286	105		30-150	2		30	B
2,4,5-T	ND	272	338	124		334	122		30-150	1		30	B
2,4,5-TP (Silvex)	ND	272	273	101		270J	99		30-150	1		30	B

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
DCAA	135		126		30-150	A
DCAA	111		107		30-150	B



METALS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-01

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9400		mg/kg	9.22	2.49	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.61	0.350	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Arsenic, Total	43.7		mg/kg	0.922	0.192	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Barium, Total	591		mg/kg	0.922	0.160	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.461	0.030	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Cadmium, Total	3.34		mg/kg	0.922	0.090	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Calcium, Total	32200		mg/kg	9.22	3.23	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Chromium, Total	51.9		mg/kg	0.922	0.089	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Cobalt, Total	11.3		mg/kg	1.84	0.153	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Copper, Total	275		mg/kg	0.922	0.238	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Iron, Total	21700		mg/kg	4.61	0.832	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Lead, Total	619		mg/kg	4.61	0.247	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Magnesium, Total	7590		mg/kg	9.22	1.42	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Manganese, Total	253		mg/kg	0.922	0.146	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Mercury, Total	0.536		mg/kg	0.076	0.016	1	12/28/18 06:30	01/03/19 21:36	EPA 7471B	1,7471B	EA
Nickel, Total	19.9		mg/kg	2.30	0.223	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Potassium, Total	5290		mg/kg	230	13.3	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Selenium, Total	1.95		mg/kg	1.84	0.238	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Silver, Total	1.74		mg/kg	0.922	0.261	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Sodium, Total	244		mg/kg	184	2.90	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.84	0.290	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Vanadium, Total	34.6		mg/kg	0.922	0.187	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Zinc, Total	1080		mg/kg	4.61	0.270	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	52		mg/kg	0.96	0.96	1		12/29/18 05:30	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-02

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 63%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8370		mg/kg	12.0	3.25	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	6.02	0.458	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Arsenic, Total	0.337	J	mg/kg	1.20	0.250	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Barium, Total	78.3		mg/kg	1.20	0.210	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Beryllium, Total	0.048	J	mg/kg	0.602	0.040	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Cadmium, Total	0.217	J	mg/kg	1.20	0.118	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Calcium, Total	3350		mg/kg	12.0	4.22	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Chromium, Total	20.6		mg/kg	1.20	0.116	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Cobalt, Total	9.48		mg/kg	2.41	0.200	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Copper, Total	22.8		mg/kg	1.20	0.311	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Iron, Total	16000		mg/kg	6.02	1.09	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Lead, Total	19.7		mg/kg	6.02	0.323	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Magnesium, Total	3840		mg/kg	12.0	1.86	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Manganese, Total	225		mg/kg	1.20	0.192	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Mercury, Total	0.131		mg/kg	0.102	0.022	1	12/28/18 06:30	01/03/19 21:37	EPA 7471B	1,7471B	EA
Nickel, Total	23.4		mg/kg	3.01	0.292	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Potassium, Total	3340		mg/kg	301	17.3	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Selenium, Total	0.626	J	mg/kg	2.41	0.311	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	1.20	0.341	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Sodium, Total	323		mg/kg	241	3.79	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.41	0.379	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Vanadium, Total	24.3		mg/kg	1.20	0.244	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Zinc, Total	40.9		mg/kg	6.02	0.353	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	21		mg/kg	1.3	1.3	1		12/29/18 05:35	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-03

Date Collected: 12/27/18 09:45

Client ID: RB01_25-27

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 60%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	13200		mg/kg	13.2	3.57	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	6.62	0.503	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Arsenic, Total	6.94		mg/kg	1.32	0.275	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Barium, Total	28.4		mg/kg	1.32	0.230	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Beryllium, Total	0.516	J	mg/kg	0.662	0.044	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Cadmium, Total	0.503	J	mg/kg	1.32	0.130	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Calcium, Total	2740		mg/kg	13.2	4.63	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Chromium, Total	28.8		mg/kg	1.32	0.127	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Cobalt, Total	9.66		mg/kg	2.65	0.220	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Copper, Total	12.5		mg/kg	1.32	0.341	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Iron, Total	26800		mg/kg	6.62	1.20	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Lead, Total	23.5		mg/kg	6.62	0.355	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Magnesium, Total	6200		mg/kg	13.2	2.04	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Manganese, Total	349		mg/kg	1.32	0.210	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Mercury, Total	0.032	J	mg/kg	0.105	0.022	1	12/28/18 06:30	01/03/19 21:27	EPA 7471B	1,7471B	EA
Nickel, Total	20.2		mg/kg	3.31	0.320	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Potassium, Total	2880		mg/kg	331	19.0	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Selenium, Total	1.06	J	mg/kg	2.65	0.341	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	1.32	0.374	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Sodium, Total	701		mg/kg	265	4.17	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.65	0.417	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Vanadium, Total	36.3		mg/kg	1.32	0.269	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Zinc, Total	69.5		mg/kg	6.62	0.388	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	29		mg/kg	1.3	1.3	1		12/29/18 03:49	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4610		mg/kg	8.55	2.31	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.28	0.325	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Arsenic, Total	7.20		mg/kg	0.855	0.178	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Barium, Total	1460		mg/kg	0.855	0.149	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.428	0.028	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Cadmium, Total	5.19		mg/kg	0.855	0.084	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Calcium, Total	37000		mg/kg	8.55	2.99	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Chromium, Total	15.4		mg/kg	0.855	0.082	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Cobalt, Total	4.93		mg/kg	1.71	0.142	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Copper, Total	19.3		mg/kg	0.855	0.221	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Iron, Total	8200		mg/kg	4.28	0.772	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Lead, Total	753		mg/kg	4.28	0.229	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Magnesium, Total	3810		mg/kg	8.55	1.32	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Manganese, Total	220		mg/kg	0.855	0.136	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Mercury, Total	0.213		mg/kg	0.071	0.015	1	12/28/18 06:30	01/03/19 21:39	EPA 7471B	1,7471B	EA
Nickel, Total	7.02		mg/kg	2.14	0.207	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Potassium, Total	1520		mg/kg	214	12.3	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Selenium, Total	0.428	J	mg/kg	1.71	0.221	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.855	0.242	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Sodium, Total	240		mg/kg	171	2.69	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.71	0.269	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Vanadium, Total	20.9		mg/kg	0.855	0.174	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Zinc, Total	2990		mg/kg	4.28	0.251	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	15		mg/kg	0.91	0.91	1		12/29/18 05:39	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5340		mg/kg	8.91	2.40	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.45	0.338	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Arsenic, Total	4.90		mg/kg	0.891	0.185	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Barium, Total	661		mg/kg	0.891	0.155	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Beryllium, Total	0.089	J	mg/kg	0.445	0.029	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Cadmium, Total	0.712	J	mg/kg	0.891	0.087	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Calcium, Total	44700		mg/kg	8.91	3.12	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Chromium, Total	18.0		mg/kg	0.891	0.086	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Cobalt, Total	5.75		mg/kg	1.78	0.148	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Copper, Total	23.4		mg/kg	0.891	0.230	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Iron, Total	11800		mg/kg	4.45	0.804	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Lead, Total	229		mg/kg	4.45	0.239	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Magnesium, Total	4440		mg/kg	8.91	1.37	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Manganese, Total	200		mg/kg	0.891	0.142	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Mercury, Total	0.177		mg/kg	0.072	0.015	1	12/28/18 06:30	01/03/19 21:46	EPA 7471B	1,7471B	EA
Nickel, Total	11.2		mg/kg	2.23	0.216	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Potassium, Total	1590		mg/kg	223	12.8	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.78	0.230	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Silver, Total	0.338	J	mg/kg	0.891	0.252	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Sodium, Total	287		mg/kg	178	2.80	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.78	0.280	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Vanadium, Total	23.8		mg/kg	0.891	0.181	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Zinc, Total	439		mg/kg	4.45	0.261	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	18		mg/kg	0.92	0.92	1		12/29/18 05:44	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9200		mg/kg	9.00	2.43	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.50	0.342	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Arsenic, Total	2.24		mg/kg	0.900	0.187	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Barium, Total	112		mg/kg	0.900	0.156	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Beryllium, Total	0.117	J	mg/kg	0.450	0.030	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Cadmium, Total	0.333	J	mg/kg	0.900	0.088	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Calcium, Total	12000		mg/kg	9.00	3.15	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Chromium, Total	18.1		mg/kg	0.900	0.086	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Cobalt, Total	9.87		mg/kg	1.80	0.149	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Copper, Total	23.9		mg/kg	0.900	0.232	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Iron, Total	18600		mg/kg	4.50	0.813	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Lead, Total	160		mg/kg	4.50	0.241	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Magnesium, Total	4260		mg/kg	9.00	1.38	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Manganese, Total	370		mg/kg	0.900	0.143	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Mercury, Total	0.364		mg/kg	0.076	0.016	1	12/28/18 06:30	01/03/19 21:47	EPA 7471B	1,7471B	EA
Nickel, Total	16.6		mg/kg	2.25	0.218	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Potassium, Total	3020		mg/kg	225	13.0	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Selenium, Total	0.504	J	mg/kg	1.80	0.232	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.900	0.255	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Sodium, Total	89.7	J	mg/kg	180	2.83	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.80	0.283	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Vanadium, Total	28.3		mg/kg	0.900	0.183	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Zinc, Total	85.2		mg/kg	4.50	0.264	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	18		mg/kg	0.96	0.96	1		12/29/18 05:49	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-07

Date Collected: 12/27/18 13:00

Client ID: RB08_14-16

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 68%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	11000		mg/kg	11.7	3.15	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	5.83	0.443	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Arsenic, Total	7.97		mg/kg	1.17	0.243	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Barium, Total	40.4		mg/kg	1.17	0.203	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Beryllium, Total	0.443	J	mg/kg	0.583	0.039	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Cadmium, Total	0.455	J	mg/kg	1.17	0.114	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Calcium, Total	2860		mg/kg	11.7	4.08	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Chromium, Total	24.1		mg/kg	1.17	0.112	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Cobalt, Total	7.78		mg/kg	2.33	0.194	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Copper, Total	19.2		mg/kg	1.17	0.301	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Iron, Total	22100		mg/kg	5.83	1.05	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Lead, Total	53.6		mg/kg	5.83	0.313	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Magnesium, Total	5030		mg/kg	11.7	1.80	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Manganese, Total	299		mg/kg	1.17	0.186	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Mercury, Total	1.45		mg/kg	0.094	0.020	1	12/28/18 06:30	01/03/19 21:49	EPA 7471B	1,7471B	EA
Nickel, Total	17.2		mg/kg	2.92	0.282	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Potassium, Total	2240		mg/kg	292	16.8	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Selenium, Total	0.607	J	mg/kg	2.33	0.301	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	1.17	0.330	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Sodium, Total	386		mg/kg	233	3.68	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.33	0.368	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Vanadium, Total	28.4		mg/kg	1.17	0.237	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Zinc, Total	73.4		mg/kg	5.83	0.342	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	24		mg/kg	1.2	1.2	1		12/29/18 05:53	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	10400		mg/kg	10.6	2.87	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	5.32	0.404	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Arsenic, Total	6.46		mg/kg	1.06	0.221	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Barium, Total	51.6		mg/kg	1.06	0.185	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Beryllium, Total	0.361	J	mg/kg	0.532	0.035	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Cadmium, Total	0.415	J	mg/kg	1.06	0.104	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Calcium, Total	5700		mg/kg	10.6	3.72	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Chromium, Total	23.9		mg/kg	1.06	0.102	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Cobalt, Total	7.84		mg/kg	2.13	0.176	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Copper, Total	23.8		mg/kg	1.06	0.274	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Iron, Total	19700		mg/kg	5.32	0.960	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Lead, Total	71.3		mg/kg	5.32	0.285	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Magnesium, Total	4740		mg/kg	10.6	1.64	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Manganese, Total	258		mg/kg	1.06	0.169	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Mercury, Total	0.125		mg/kg	0.087	0.018	1	12/28/18 06:30	01/03/19 21:51	EPA 7471B	1,7471B	EA
Nickel, Total	18.4		mg/kg	2.66	0.257	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Potassium, Total	2340		mg/kg	266	15.3	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Selenium, Total	0.999	J	mg/kg	2.13	0.274	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	1.06	0.301	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Sodium, Total	351		mg/kg	213	3.35	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.13	0.335	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Vanadium, Total	27.0		mg/kg	1.06	0.216	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Zinc, Total	96.3		mg/kg	5.32	0.311	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	24		mg/kg	1.1	1.1	1		12/29/18 05:58	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-09

Date Collected: 12/27/18 09:35

Client ID: RB01_9-11

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9740		mg/kg	8.93	2.41	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.46	0.339	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Arsenic, Total	3.88		mg/kg	0.893	0.186	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Barium, Total	92.0		mg/kg	0.893	0.155	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Beryllium, Total	0.170	J	mg/kg	0.446	0.030	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Cadmium, Total	0.402	J	mg/kg	0.893	0.088	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Calcium, Total	13300		mg/kg	8.93	3.12	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Chromium, Total	19.6		mg/kg	0.893	0.086	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Cobalt, Total	9.06		mg/kg	1.79	0.148	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Copper, Total	88.4		mg/kg	0.893	0.230	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Iron, Total	18800		mg/kg	4.46	0.806	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Lead, Total	134		mg/kg	4.46	0.239	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Magnesium, Total	4520		mg/kg	8.93	1.38	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Manganese, Total	234		mg/kg	0.893	0.142	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Mercury, Total	0.262		mg/kg	0.072	0.015	1	12/28/18 06:30	01/03/19 21:53	EPA 7471B	1,7471B	EA
Nickel, Total	19.8		mg/kg	2.23	0.216	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Potassium, Total	2880		mg/kg	223	12.9	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Selenium, Total	1.03	J	mg/kg	1.79	0.230	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.893	0.253	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Sodium, Total	209		mg/kg	179	2.81	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.79	0.281	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Vanadium, Total	23.7		mg/kg	0.893	0.181	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Zinc, Total	216		mg/kg	4.46	0.262	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	20		mg/kg	0.92	0.92	1		12/29/18 06:02	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.100	0.032	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Antimony, Total	ND		mg/l	0.050	0.007	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Arsenic, Total	ND		mg/l	0.005	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Barium, Total	0.002	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Beryllium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Cadmium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Calcium, Total	ND		mg/l	0.100	0.035	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Chromium, Total	0.003	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Cobalt, Total	ND		mg/l	0.020	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Copper, Total	0.005	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Iron, Total	ND		mg/l	0.050	0.009	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Lead, Total	ND		mg/l	0.010	0.003	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Magnesium, Total	ND		mg/l	0.100	0.015	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Manganese, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/03/19 11:53	01/03/19 16:26	EPA 7470A	1,7470A	GD
Nickel, Total	ND		mg/l	0.025	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Potassium, Total	ND		mg/l	2.50	0.237	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Selenium, Total	ND		mg/l	0.010	0.004	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Silver, Total	ND		mg/l	0.007	0.003	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Sodium, Total	ND		mg/l	2.00	0.120	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Thallium, Total	ND		mg/l	0.020	0.003	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Vanadium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Zinc, Total	ND		mg/l	0.050	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/03/19 12:01	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG1193357-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	12/28/18 06:30	01/03/19 21:24	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG1193639-1										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Antimony, Total	ND	mg/kg	2.00	0.152	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Barium, Total	ND	mg/kg	0.400	0.070	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Calcium, Total	ND	mg/kg	4.00	1.40	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Chromium, Total	ND	mg/kg	0.400	0.038	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Cobalt, Total	ND	mg/kg	0.800	0.066	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Copper, Total	ND	mg/kg	0.400	0.103	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Iron, Total	ND	mg/kg	2.00	0.361	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Lead, Total	ND	mg/kg	2.00	0.107	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Manganese, Total	ND	mg/kg	0.400	0.064	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Nickel, Total	ND	mg/kg	1.00	0.097	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Potassium, Total	ND	mg/kg	100	5.76	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Selenium, Total	ND	mg/kg	0.800	0.103	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Silver, Total	ND	mg/kg	0.400	0.113	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Sodium, Total	1.49	J	mg/kg	80.0	1.26	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC
Thallium, Total	ND	mg/kg	0.800	0.126	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Zinc, Total	ND	mg/kg	2.00	0.117	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 11 Batch: WG1194043-1										
Aluminum, Total	ND		mg/l	0.100	0.032	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Antimony, Total	ND		mg/l	0.050	0.007	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Arsenic, Total	ND		mg/l	0.005	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Barium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Beryllium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Cadmium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Calcium, Total	ND		mg/l	0.100	0.035	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Chromium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Cobalt, Total	ND		mg/l	0.020	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Copper, Total	0.004	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Iron, Total	ND		mg/l	0.050	0.009	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Lead, Total	ND		mg/l	0.010	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Magnesium, Total	ND		mg/l	0.100	0.015	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Manganese, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Nickel, Total	ND		mg/l	0.025	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Potassium, Total	ND		mg/l	2.50	0.237	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Selenium, Total	ND		mg/l	0.010	0.004	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Silver, Total	ND		mg/l	0.007	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Sodium, Total	ND		mg/l	2.00	0.120	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Thallium, Total	ND		mg/l	0.020	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Vanadium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Zinc, Total	ND		mg/l	0.050	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC

Prep Information

Digestion Method: EPA 3005A



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 11 Batch: WG1194425-1									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	01/03/19 11:53	01/03/19 16:22	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1193357-2 SRM Lot Number: D102-540								
Mercury, Total	75		-		65-134	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1193639-2 SRM Lot Number: D102-540					
Aluminum, Total	67	-	49-150	-	
Antimony, Total	148	-	1-199	-	
Arsenic, Total	90	-	83-117	-	
Barium, Total	86	-	83-118	-	
Beryllium, Total	89	-	83-116	-	
Cadmium, Total	98	-	83-118	-	
Calcium, Total	86	-	82-118	-	
Chromium, Total	85	-	83-117	-	
Cobalt, Total	88	-	84-116	-	
Copper, Total	85	-	84-116	-	
Iron, Total	83	-	61-139	-	
Lead, Total	86	-	82-118	-	
Magnesium, Total	77	-	76-124	-	
Manganese, Total	88	-	82-118	-	
Nickel, Total	89	-	83-117	-	
Potassium, Total	76	-	70-130	-	
Selenium, Total	90	-	79-121	-	
Silver, Total	86	-	80-120	-	
Sodium, Total	94	-	74-126	-	
Thallium, Total	95	-	81-119	-	
Vanadium, Total	84	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1193639-2 SRM Lot Number: D102-540					
Zinc, Total	87	-	81-118	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1194043-2					
Aluminum, Total	111	-	80-120	-	
Antimony, Total	98	-	80-120	-	
Arsenic, Total	115	-	80-120	-	
Barium, Total	105	-	80-120	-	
Beryllium, Total	104	-	80-120	-	
Cadmium, Total	111	-	80-120	-	
Calcium, Total	108	-	80-120	-	
Chromium, Total	104	-	80-120	-	
Cobalt, Total	103	-	80-120	-	
Copper, Total	102	-	80-120	-	
Iron, Total	112	-	80-120	-	
Lead, Total	110	-	80-120	-	
Magnesium, Total	112	-	80-120	-	
Manganese, Total	102	-	80-120	-	
Nickel, Total	104	-	80-120	-	
Potassium, Total	109	-	80-120	-	
Selenium, Total	118	-	80-120	-	
Silver, Total	110	-	80-120	-	
Sodium, Total	115	-	80-120	-	
Thallium, Total	109	-	80-120	-	
Vanadium, Total	107	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1194043-2					
Zinc, Total	110	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1194425-2					
Mercury, Total	102	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1193357-3 WG1193357-4 QC Sample: L1853234-03 Client ID: RB01_25-27									
Mercury, Total	0.032J	0.208	0.210	101	0.222	107	80-120	6	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits		
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1193639-3 WG1193639-4 QC Sample: L1853234-03 Client ID: RB01_25-27											
Aluminum, Total	13200	265	14700	566	Q	14000	304	Q	75-125	5	20
Antimony, Total	ND	66.2	50.8	77		49.4	75		75-125	3	20
Arsenic, Total	6.94	15.9	21.7	93		21.2	90		75-125	2	20
Barium, Total	28.4	265	268	90		251	85		75-125	7	20
Beryllium, Total	0.516J	6.62	6.45	97		6.17	94		75-125	4	20
Cadmium, Total	0.503J	6.76	6.30	93		6.09	91		75-125	3	20
Calcium, Total	2740	1320	3520	59	Q	3310	43	Q	75-125	6	20
Chromium, Total	28.8	26.5	52.5	89		50.8	84		75-125	3	20
Cobalt, Total	9.66	66.2	64.3	82		61.6	79		75-125	4	20
Copper, Total	12.5	33.1	39.3	81		35.9	71	Q	75-125	9	20
Iron, Total	26800	132	28800	1510	Q	27900	836	Q	75-125	3	20
Lead, Total	23.5	67.6	69.2	68	Q	66.5	64	Q	75-125	4	20
Magnesium, Total	6200	1320	7600	106		7270	81		75-125	4	20
Manganese, Total	349	66.2	405	84		386	56	Q	75-125	5	20
Nickel, Total	20.2	66.2	75.0	83		71.6	78		75-125	5	20
Potassium, Total	2880	1320	4550	126	Q	4150	96		75-125	9	20
Selenium, Total	1.06J	15.9	14.6	92		13.7	87		75-125	6	20
Silver, Total	ND	39.7	36.3	91		35.1	89		75-125	3	20
Sodium, Total	701	1320	1890	90		1820	85		75-125	4	20
Thallium, Total	ND	15.9	12.0	75		11.8	75		75-125	2	20
Vanadium, Total	36.3	66.2	96.8	91		92.8	86		75-125	4	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1193639-3 WG1193639-4 QC Sample: L1853234-03 Client ID: RB01_25-27									
Zinc, Total	69.5	66.2	122	79	117	72	Q 75-125	4	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194043-3 QC Sample: L1852881-01 Client ID: MS Sample									
Aluminum, Total	0.139	2	2.39	112	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.523	105	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.138	115	-	-	75-125	-	20
Barium, Total	0.004J	2	2.13	106	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.053	106	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.057	112	-	-	75-125	-	20
Calcium, Total	7.51	10	19.2	117	-	-	75-125	-	20
Chromium, Total	ND	0.2	0.212	106	-	-	75-125	-	20
Cobalt, Total	0.002J	0.5	0.523	105	-	-	75-125	-	20
Copper, Total	0.005J	0.25	0.261	104	-	-	75-125	-	20
Iron, Total	0.151	1	1.29	114	-	-	75-125	-	20
Lead, Total	ND	0.51	0.562	110	-	-	75-125	-	20
Magnesium, Total	1.50	10	12.7	112	-	-	75-125	-	20
Manganese, Total	0.018	0.5	0.530	102	-	-	75-125	-	20
Nickel, Total	0.007J	0.5	0.529	106	-	-	75-125	-	20
Potassium, Total	0.529J	10	11.4	114	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.142	118	-	-	75-125	-	20
Silver, Total	ND	0.05	0.054	108	-	-	75-125	-	20
Sodium, Total	2.04	10	13.4	114	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.131	109	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.539	108	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194043-3 QC Sample: L1852881-01 Client ID: MS Sample									
Zinc, Total	0.010J	0.5	0.566	113	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194425-3 QC Sample: L1853234-11 Client ID: SOFB02_122718									
Mercury, Total	ND	0.005	0.00459	92	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194043-4 QC Sample: L1852881-01 Client ID: DUP Sample						
Iron, Total	0.151	0.154	mg/l	2		20
Manganese, Total	0.018	0.019	mg/l	2		20
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194425-4 QC Sample: L1853234-11 Client ID: SOFB02_122718						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.2		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	0.31	J	mg/kg	1.1	0.23	1	12/28/18 14:00	01/02/19 12:00	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.962	0.192	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	62.6		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	1.2	J	mg/kg	1.4	0.31	1	12/28/18 14:00	01/02/19 11:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.28	0.256	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-03

Date Collected: 12/27/18 09:45

Client ID: RB01_25-27

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	60.3		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.6	0.34	1	12/28/18 14:00	01/02/19 11:44	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.33	0.265	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.1		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/28/18 14:00	01/02/19 11:47	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.908	0.182	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.1		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/28/18 14:00	01/02/19 11:48	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.918	0.184	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.8		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/28/18 14:00	01/02/19 11:49	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.955	0.191	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-07

Date Collected: 12/27/18 13:00

Client ID: RB08_14-16

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	67.8		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.4	0.30	1	12/28/18 14:00	01/02/19 11:50	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.18	0.236	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08

Date Collected: 12/27/18 00:00

Client ID: SODUP02_122718

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	72.3		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.3	0.27	1	12/28/18 14:00	01/02/19 11:51	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.11	0.221	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09

Date Collected: 12/27/18 09:35

Client ID: RB01_9-11

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.2		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/28/18 14:00	01/02/19 11:52	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.917	0.183	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/28/18 10:40	12/28/18 15:15	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	12/28/18 05:00	12/28/18 05:42	1,7196A	JW



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1193370-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	12/28/18 05:00	12/28/18 05:41	1,7196A	JW
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1193431-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/28/18 10:40	12/28/18 12:57	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1193512-1										
Cyanide, Total	ND		mg/kg	0.94	0.20	1	12/28/18 14:00	01/02/19 11:36	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1193635-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1193370-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1193431-2 WG1193431-3								
Cyanide, Total	102		106		85-115	4		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1193512-2 WG1193512-3								
Cyanide, Total	80		73	Q	80-120	8		35
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1193635-2								
Chromium, Hexavalent	90		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193370-4 QC Sample: L1853234-11 Client ID: SOFB02_122718												
Chromium, Hexavalent	ND	0.1	0.098	98		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193431-4 WG1193431-5 QC Sample: L1853104-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.162	81		0.183	92		80-120	12		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193512-4 WG1193512-5 QC Sample: L1853234-03 Client ID: RB01_25-27												
Cyanide, Total	ND	16	15	95		15	98		75-125	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193635-4 WG1193635-5 QC Sample: L1853234-03 Client ID: RB01_25-27												
Chromium, Hexavalent	ND	2110	289	14	Q	62.0J	3	Q	75-125	129	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193370-3 QC Sample: L1853234-11 Client ID: SOFB02_122718						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193532-1 QC Sample: L1853234-03 Client ID: RB01_25-27						
Solids, Total	60.3	59.2	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193635-6 QC Sample: L1853234-03 Client ID: RB01_25-27						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-01A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-01B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-01C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-01D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-01F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-01G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-02A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-02B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-02C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-02D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-02F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-02G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-03A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-03A1	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-03A2	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-03B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03B1	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03B2	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03C1	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03C2	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-03D1	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-03D2	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-03E1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-03E2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-03F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-03F1	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-03F2	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01071917:00
Lab Number: L1853234
Report Date: 01/07/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-03G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-03G1	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-03G2	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-04A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-04B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-04C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-04D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-04F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-04G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-05A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-05B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-05C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-05D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-05F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-05G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01071917:00
Lab Number: L1853234
Report Date: 01/07/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-06A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-06B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-06C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-06D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-06F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-06G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-07A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-07B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-07C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-07D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-07F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-07G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-08A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-08B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-08C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-08D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01071917:00
Lab Number: L1853234
Report Date: 01/07/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-08F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-08G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-09A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-09B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-09C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-09D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-09E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-09F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-09G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-10A	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L1853234-10B	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L1853234-11A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1853234-11B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1853234-11C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1853234-11D	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-11E	Plastic 250ml NaOH preserved	B	>12	>12	3.6	Y	Absent		TCN-9010(14)
L1853234-11F	Plastic 500ml unpreserved	B	7	7	3.6	Y	Absent		HEXCR-7196(1)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01071917:00
Lab Number: L1853234
Report Date: 01/07/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-11G	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1853234-11H	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1853234-11I	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1853234-11J	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1853234-11K	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1853234-11L	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1853234-11M	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1853234-11N	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #																																																																																																																																																											
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Please also cc: datamanagement@langan.com and vzuluaga@langan.com		<table border="1" style="width:100%; border-collapse: collapse; font-size: x-small;"> <tr> <th>Sample ID</th> <th>Collection Date</th> <th>Collection Time</th> <th>Sample Matrix</th> <th>Sampler's Initials</th> <th>Part 375/TCL VOCs</th> <th>Part 375/TCL SVOCs</th> <th>Part 375/TCL PCBs</th> <th>Pesticides</th> <th>Herbicides</th> <th>TAL Metals</th> <th>Hex Chromium</th> <th>Total Cyanide</th> <th>Sample Specific Comments</th> </tr> <tr> <td>53234-01</td> <td>12/27/18</td> <td>0930</td> <td>Soil</td> <td>JA</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> <tr> <td>RB01-10-12</td> <td></td> <td>0935</td> <td></td> <td>JA</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td>JA 12-27-18</td> </tr> <tr> <td>-02</td> <td></td> <td>0940</td> <td></td> <td>JA</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> <tr> <td>-03</td> <td></td> <td>0945</td> <td></td> <td>PH</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td>MS/MSD collected</td> </tr> <tr> <td>-04</td> <td></td> <td>1245</td> <td></td> <td>JA</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> <tr> <td>-05</td> <td></td> <td>1250</td> <td></td> <td>JA</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> <tr> <td>-06</td> <td></td> <td>1255</td> <td></td> <td>JA</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> <tr> <td>-07</td> <td></td> <td>1300</td> <td></td> <td>JA</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> <tr> <td>-08</td> <td></td> <td>-</td> <td></td> <td>JA</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td>JA 12-27-18</td> </tr> </table>		Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total Cyanide	Sample Specific Comments	53234-01	12/27/18	0930	Soil	JA	X	X	X	X	X	X	X	X		RB01-10-12		0935		JA	X	X	X	X	X	X	X	X	JA 12-27-18	-02		0940		JA	X	X	X	X	X	X	X	X		-03		0945		PH	X	X	X	X	X	X	X	X	MS/MSD collected	-04		1245		JA	X	X	X	X	X	X	X	X		-05		1250		JA	X	X	X	X	X	X	X	X		-06		1255		JA	X	X	X	X	X	X	X	X		-07		1300		JA	X	X	X	X	X	X	X	X		-08		-		JA	X	X	X	X	X	X	X	X							X	X	X	X	X	X	X	X	JA 12-27-18		
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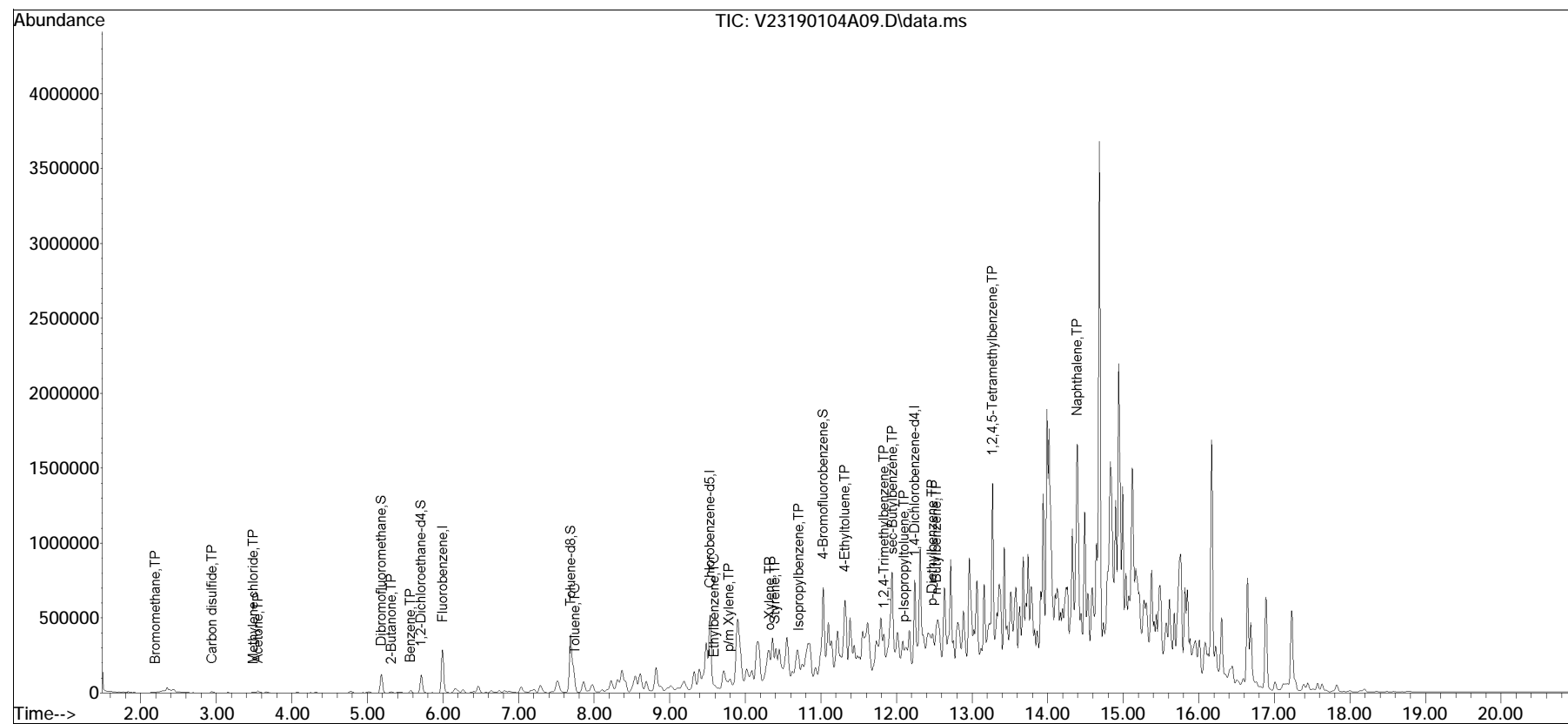
 Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-698-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 2 of 2	Date Rec'd in Lab 12/27/18	ALPHA Job # 11853234																																																																												
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #																																																																											
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		(Use Project name as Project #) <input type="checkbox"/> Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																											
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.			ANALYSIS <table border="1" style="width:100%; border-collapse: collapse; font-size: 8px;"> <tr> <th>Part 375/TCL VOCs</th> <th>Part 375/TCL SVOCs</th> <th>Part 375/TCL PCBs</th> <th>Pesticides</th> <th>Herbicides</th> <th>TAL Metals</th> <th>Hex Chromium</th> <th>Total Organics</th> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> </table>			Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total Organics	X	X	X	X	X	X	X	X	Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)		Total Bottles																																																									
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Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA123\2019\190104A\
 Data File : V23190104A09.D
 Acq On : 04 Jan 2019 02:59 pm
 Operator : VOA123:MKS
 Sample : 11853234-02,31H,3.60,5,0.100,,a
 Misc : WG1195021,ICAL15371
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 04 15:40:58 2019
 Quant Method : I:\VOLATILES\VOA123\2019\190104A\V123_190103D_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jan 04 09:22:26 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90104A\V23190104A03.D•





ANALYTICAL REPORT

Lab Number:	L1900156
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/09/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900156-01	RB09_0-2	SOIL	BRONX, NY	01/02/19 13:40	01/02/19
L1900156-02	RB09_19-21	SOIL	BRONX, NY	01/02/19 13:45	01/02/19
L1900156-03	RB09_28-30	SOIL	BRONX, NY	01/02/19 13:50	01/02/19
L1900156-04	RB11_0-2	SOIL	BRONX, NY	01/02/19 10:30	01/02/19
L1900156-05	RB11_19-21	SOIL	BRONX, NY	01/02/19 10:35	01/02/19
L1900156-06	RB11_28-30	SOIL	BRONX, NY	01/02/19 10:40	01/02/19
L1900156-07	SODUP03_010219	SOIL	BRONX, NY	01/02/19 00:00	01/02/19
L1900156-08	SOTB04_010219	WATER	BRONX, NY	01/02/19 00:00	01/02/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

L1900156-03: The collection date and time on the chain of custody was 02-JAN-19 13:40; however, the collection date/time on the container label was 02-JAN-19 13:50. At the client's request, the collection date/time is reported as 02-JAN-19 13:50.

Volatile Organics

L1900156-02, -05 and -07: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1900156-05: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (165%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L1900156-07: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (146%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Pesticides

L1900156-05 and -07: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1900156-05 and -07: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Herbicides

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Case Narrative (continued)

L1900156-07: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1900156-07: The surrogate recoveries are below the acceptance criteria for dcaa (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L1900156-01 through -07: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1194383-2/-3 LCS/LCSD recoveries (68%/72%), associated with L1900156-01 through -07, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/09/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 14:04
 Analyst: JC
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	0.70	J	ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.26	1
Tetrachloroethene	0.46	J	ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.69	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.16	1
Benzene	ND		ug/kg	0.50	0.16	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.93	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.33	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-01

Date Collected: 01/02/19 13:40

Client ID: RB09_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.91	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.5	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	0.99	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	100	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	98		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02 D
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 14:29
 Analyst: JC
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	2700	1200	10
1,1-Dichloroethane	ND		ug/kg	530	78.	10
Chloroform	ND		ug/kg	800	75.	10
Carbon tetrachloride	ND		ug/kg	530	120	10
1,2-Dichloropropane	ND		ug/kg	530	67.	10
Dibromochloromethane	ND		ug/kg	530	75.	10
1,1,2-Trichloroethane	ND		ug/kg	530	140	10
Tetrachloroethene	ND		ug/kg	270	100	10
Chlorobenzene	ND		ug/kg	270	68.	10
Trichlorofluoromethane	ND		ug/kg	2100	370	10
1,2-Dichloroethane	ND		ug/kg	530	140	10
1,1,1-Trichloroethane	ND		ug/kg	270	89.	10
Bromodichloromethane	ND		ug/kg	270	58.	10
trans-1,3-Dichloropropene	ND		ug/kg	530	140	10
cis-1,3-Dichloropropene	ND		ug/kg	270	84.	10
1,3-Dichloropropene, Total	ND		ug/kg	270	84.	10
1,1-Dichloropropene	ND		ug/kg	270	85.	10
Bromoform	ND		ug/kg	2100	130	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	270	89.	10
Benzene	1100		ug/kg	270	89.	10
Toluene	ND		ug/kg	530	290	10
Ethylbenzene	790		ug/kg	530	75.	10
Chloromethane	ND		ug/kg	2100	500	10
Bromomethane	ND		ug/kg	1100	310	10
Vinyl chloride	ND		ug/kg	530	180	10
Chloroethane	ND		ug/kg	1100	240	10
1,1-Dichloroethene	ND		ug/kg	530	130	10
trans-1,2-Dichloroethene	ND		ug/kg	800	73.	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-02 D

Date Collected: 01/02/19 13:45

Client ID: RB09_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	270	73.	10
1,2-Dichlorobenzene	ND		ug/kg	1100	77.	10
1,3-Dichlorobenzene	ND		ug/kg	1100	79.	10
1,4-Dichlorobenzene	ND		ug/kg	1100	91.	10
Methyl tert butyl ether	ND		ug/kg	1100	110	10
p/m-Xylene	500	J	ug/kg	1100	300	10
o-Xylene	ND		ug/kg	530	160	10
Xylenes, Total	500	J	ug/kg	530	160	10
cis-1,2-Dichloroethene	ND		ug/kg	530	94.	10
1,2-Dichloroethene, Total	ND		ug/kg	530	73.	10
Dibromomethane	ND		ug/kg	1100	130	10
Styrene	ND		ug/kg	530	100	10
Dichlorodifluoromethane	ND		ug/kg	5300	490	10
Acetone	ND		ug/kg	5300	2600	10
Carbon disulfide	ND		ug/kg	5300	2400	10
2-Butanone	ND		ug/kg	5300	1200	10
Vinyl acetate	ND		ug/kg	5300	1100	10
4-Methyl-2-pentanone	ND		ug/kg	5300	680	10
1,2,3-Trichloropropane	ND		ug/kg	1100	68.	10
2-Hexanone	ND		ug/kg	5300	630	10
Bromochloromethane	ND		ug/kg	1100	110	10
2,2-Dichloropropane	ND		ug/kg	1100	110	10
1,2-Dibromoethane	ND		ug/kg	530	150	10
1,3-Dichloropropane	ND		ug/kg	1100	89.	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	270	70.	10
Bromobenzene	ND		ug/kg	1100	78.	10
n-Butylbenzene	7200		ug/kg	530	89.	10
sec-Butylbenzene	2600		ug/kg	530	78.	10
tert-Butylbenzene	260	J	ug/kg	1100	63.	10
o-Chlorotoluene	ND		ug/kg	1100	100	10
p-Chlorotoluene	ND		ug/kg	1100	58.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1600	530	10
Hexachlorobutadiene	ND		ug/kg	2100	90.	10
Isopropylbenzene	8700		ug/kg	530	58.	10
p-Isopropyltoluene	340	J	ug/kg	530	58.	10
Naphthalene	600	J	ug/kg	2100	350	10
Acrylonitrile	ND		ug/kg	2100	610	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02 D
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	21000		ug/kg	530	91.	10
1,2,3-Trichlorobenzene	ND		ug/kg	1100	170	10
1,2,4-Trichlorobenzene	ND		ug/kg	1100	140	10
1,3,5-Trimethylbenzene	130	J	ug/kg	1100	100	10
1,2,4-Trimethylbenzene	ND		ug/kg	1100	180	10
1,4-Dioxane	ND		ug/kg	53000	19000	10
p-Diethylbenzene	5300		ug/kg	1100	95.	10
p-Ethyltoluene	1100		ug/kg	1100	200	10
1,2,4,5-Tetramethylbenzene	17000		ug/kg	1100	100	10
Ethyl ether	ND		ug/kg	1100	180	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	2700	760	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	128		70-130
Dibromofluoromethane	86		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 14:54
 Analyst: JC
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1
Dibromochloromethane	ND		ug/kg	0.98	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.49	0.16	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	0.19	J	ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	0.89	J	ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	3.9	0.91	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
Chloroethane	ND		ug/kg	2.0	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
Xylenes, Total	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.13	1
Dibromomethane	ND		ug/kg	2.0	0.23	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.90	1
Acetone	5.5	J	ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.5	1
2-Butanone	ND		ug/kg	9.8	2.2	1
Vinyl acetate	ND		ug/kg	9.8	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.12	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	2.0		ug/kg	0.98	0.16	1
sec-Butylbenzene	1.3		ug/kg	0.98	0.14	1
tert-Butylbenzene	0.48	J	ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.98	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	2.8		ug/kg	0.98	0.11	1
p-Isopropyltoluene	0.40	J	ug/kg	0.98	0.11	1
Naphthalene	5.4		ug/kg	3.9	0.64	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
Client ID: RB09_28-30
Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	6.0		ug/kg	0.98	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	0.27	J	ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	98	34.	1
p-Diethylbenzene	1.5	J	ug/kg	2.0	0.17	1
p-Ethyltoluene	0.74	J	ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	5.0		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	93		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 15:20
 Analyst: JC
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.96	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.96	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.96	0.12	1
Dibromochloromethane	ND		ug/kg	0.96	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.96	0.26	1
Tetrachloroethene	0.38	J	ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	0.84		ug/kg	0.48	0.16	1
Toluene	2.3		ug/kg	0.96	0.52	1
Ethylbenzene	0.56	J	ug/kg	0.96	0.14	1
Chloromethane	ND		ug/kg	3.8	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.96	0.32	1
Chloroethane	ND		ug/kg	1.9	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-04

Date Collected: 01/02/19 10:30

Client ID: RB11_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	4.7		ug/kg	1.9	0.54	1
o-Xylene	2.5		ug/kg	0.96	0.28	1
Xylenes, Total	7.2		ug/kg	0.96	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.96	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.96	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.88	1
Acetone	24		ug/kg	9.6	4.6	1
Carbon disulfide	ND		ug/kg	9.6	4.4	1
2-Butanone	ND		ug/kg	9.6	2.1	1
Vinyl acetate	ND		ug/kg	9.6	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.6	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.96	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.96	0.16	1
sec-Butylbenzene	0.16	J	ug/kg	0.96	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.96	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	0.19	J	ug/kg	0.96	0.10	1
p-Isopropyltoluene	0.24	J	ug/kg	0.96	0.10	1
Naphthalene	2.6	J	ug/kg	3.8	0.63	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
Client ID: RB11_0-2
Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.40	J	ug/kg	0.96	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	4.1		ug/kg	1.9	0.19	1
1,2,4-Trimethylbenzene	6.6		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	96	34.	1
p-Diethylbenzene	15		ug/kg	1.9	0.17	1
p-Ethyltoluene	4.4		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	5.9		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	123		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05 D
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 15:45
 Analyst: JC
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	600	280	2
1,1-Dichloroethane	ND		ug/kg	120	18.	2
Chloroform	ND		ug/kg	180	17.	2
Carbon tetrachloride	ND		ug/kg	120	28.	2
1,2-Dichloropropane	ND		ug/kg	120	15.	2
Dibromochloromethane	ND		ug/kg	120	17.	2
1,1,2-Trichloroethane	ND		ug/kg	120	32.	2
Tetrachloroethene	ND		ug/kg	60	24.	2
Chlorobenzene	ND		ug/kg	60	15.	2
Trichlorofluoromethane	ND		ug/kg	480	84.	2
1,2-Dichloroethane	ND		ug/kg	120	31.	2
1,1,1-Trichloroethane	ND		ug/kg	60	20.	2
Bromodichloromethane	ND		ug/kg	60	13.	2
trans-1,3-Dichloropropene	ND		ug/kg	120	33.	2
cis-1,3-Dichloropropene	ND		ug/kg	60	19.	2
1,3-Dichloropropene, Total	ND		ug/kg	60	19.	2
1,1-Dichloropropene	ND		ug/kg	60	19.	2
Bromoform	ND		ug/kg	480	30.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	60	20.	2
Benzene	ND		ug/kg	60	20.	2
Toluene	ND		ug/kg	120	66.	2
Ethylbenzene	260		ug/kg	120	17.	2
Chloromethane	ND		ug/kg	480	110	2
Bromomethane	ND		ug/kg	240	70.	2
Vinyl chloride	ND		ug/kg	120	40.	2
Chloroethane	ND		ug/kg	240	54.	2
1,1-Dichloroethene	ND		ug/kg	120	29.	2
trans-1,2-Dichloroethene	ND		ug/kg	180	16.	2

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-05 D

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	60	16.	2
1,2-Dichlorobenzene	ND		ug/kg	240	17.	2
1,3-Dichlorobenzene	ND		ug/kg	240	18.	2
1,4-Dichlorobenzene	ND		ug/kg	240	21.	2
Methyl tert butyl ether	ND		ug/kg	240	24.	2
p/m-Xylene	ND		ug/kg	240	68.	2
o-Xylene	ND		ug/kg	120	35.	2
Xylenes, Total	ND		ug/kg	120	35.	2
cis-1,2-Dichloroethene	ND		ug/kg	120	21.	2
1,2-Dichloroethene, Total	ND		ug/kg	120	16.	2
Dibromomethane	ND		ug/kg	240	29.	2
Styrene	ND		ug/kg	120	24.	2
Dichlorodifluoromethane	ND		ug/kg	1200	110	2
Acetone	ND		ug/kg	1200	580	2
Carbon disulfide	ND		ug/kg	1200	550	2
2-Butanone	ND		ug/kg	1200	270	2
Vinyl acetate	ND		ug/kg	1200	260	2
4-Methyl-2-pentanone	ND		ug/kg	1200	150	2
1,2,3-Trichloropropane	ND		ug/kg	240	15.	2
2-Hexanone	ND		ug/kg	1200	140	2
Bromochloromethane	ND		ug/kg	240	25.	2
2,2-Dichloropropane	ND		ug/kg	240	24.	2
1,2-Dibromoethane	ND		ug/kg	120	34.	2
1,3-Dichloropropane	ND		ug/kg	240	20.	2
1,1,1,2-Tetrachloroethane	ND		ug/kg	60	16.	2
Bromobenzene	ND		ug/kg	240	18.	2
n-Butylbenzene	4000		ug/kg	120	20.	2
sec-Butylbenzene	1400		ug/kg	120	18.	2
tert-Butylbenzene	160	J	ug/kg	240	14.	2
o-Chlorotoluene	ND		ug/kg	240	23.	2
p-Chlorotoluene	ND		ug/kg	240	13.	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	360	120	2
Hexachlorobutadiene	ND		ug/kg	480	20.	2
Isopropylbenzene	3000		ug/kg	120	13.	2
p-Isopropyltoluene	580		ug/kg	120	13.	2
Naphthalene	2700		ug/kg	480	78.	2
Acrylonitrile	ND		ug/kg	480	140	2

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05 D
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	9100		ug/kg	120	21.	2
1,2,3-Trichlorobenzene	ND		ug/kg	240	39.	2
1,2,4-Trichlorobenzene	ND		ug/kg	240	33.	2
1,3,5-Trimethylbenzene	250		ug/kg	240	23.	2
1,2,4-Trimethylbenzene	210	J	ug/kg	240	40.	2
1,4-Dioxane	ND		ug/kg	12000	4200	2
p-Diethylbenzene	3500		ug/kg	240	21.	2
p-Ethyltoluene	320		ug/kg	240	46.	2
1,2,4,5-Tetramethylbenzene	13000		ug/kg	240	23.	2
Ethyl ether	ND		ug/kg	240	41.	2
trans-1,4-Dichloro-2-butene	ND		ug/kg	600	170	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	165	Q	70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 16:10
 Analyst: JC
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.7	1.7	1
1,1-Dichloroethane	ND		ug/kg	0.74	0.11	1
Chloroform	0.17	J	ug/kg	1.1	0.10	1
Carbon tetrachloride	ND		ug/kg	0.74	0.17	1
1,2-Dichloropropane	ND		ug/kg	0.74	0.09	1
Dibromochloromethane	ND		ug/kg	0.74	0.10	1
1,1,2-Trichloroethane	ND		ug/kg	0.74	0.20	1
Tetrachloroethene	ND		ug/kg	0.37	0.14	1
Chlorobenzene	ND		ug/kg	0.37	0.09	1
Trichlorofluoromethane	ND		ug/kg	3.0	0.52	1
1,2-Dichloroethane	ND		ug/kg	0.74	0.19	1
1,1,1-Trichloroethane	ND		ug/kg	0.37	0.12	1
Bromodichloromethane	ND		ug/kg	0.37	0.08	1
trans-1,3-Dichloropropene	ND		ug/kg	0.74	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.37	0.12	1
1,3-Dichloropropene, Total	ND		ug/kg	0.37	0.12	1
1,1-Dichloropropene	ND		ug/kg	0.37	0.12	1
Bromoform	ND		ug/kg	3.0	0.18	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.37	0.12	1
Benzene	0.16	J	ug/kg	0.37	0.12	1
Toluene	ND		ug/kg	0.74	0.40	1
Ethylbenzene	11		ug/kg	0.74	0.10	1
Chloromethane	ND		ug/kg	3.0	0.69	1
Bromomethane	ND		ug/kg	1.5	0.43	1
Vinyl chloride	ND		ug/kg	0.74	0.25	1
Chloroethane	ND		ug/kg	1.5	0.34	1
1,1-Dichloroethene	ND		ug/kg	0.74	0.18	1
trans-1,2-Dichloroethene	ND		ug/kg	1.1	0.10	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.37	0.10	1
1,2-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,3-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,4-Dichlorobenzene	ND		ug/kg	1.5	0.13	1
Methyl tert butyl ether	ND		ug/kg	1.5	0.15	1
p/m-Xylene	ND		ug/kg	1.5	0.42	1
o-Xylene	ND		ug/kg	0.74	0.22	1
Xylenes, Total	ND		ug/kg	0.74	0.22	1
cis-1,2-Dichloroethene	ND		ug/kg	0.74	0.13	1
1,2-Dichloroethene, Total	ND		ug/kg	0.74	0.10	1
Dibromomethane	ND		ug/kg	1.5	0.18	1
Styrene	ND		ug/kg	0.74	0.14	1
Dichlorodifluoromethane	ND		ug/kg	7.4	0.68	1
Acetone	4.2	J	ug/kg	7.4	3.6	1
Carbon disulfide	ND		ug/kg	7.4	3.4	1
2-Butanone	ND		ug/kg	7.4	1.6	1
Vinyl acetate	ND		ug/kg	7.4	1.6	1
4-Methyl-2-pentanone	ND		ug/kg	7.4	0.95	1
1,2,3-Trichloropropane	ND		ug/kg	1.5	0.09	1
2-Hexanone	ND		ug/kg	7.4	0.88	1
Bromochloromethane	ND		ug/kg	1.5	0.15	1
2,2-Dichloropropane	ND		ug/kg	1.5	0.15	1
1,2-Dibromoethane	ND		ug/kg	0.74	0.21	1
1,3-Dichloropropane	ND		ug/kg	1.5	0.12	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.37	0.10	1
Bromobenzene	ND		ug/kg	1.5	0.11	1
n-Butylbenzene	1.4		ug/kg	0.74	0.12	1
sec-Butylbenzene	1.1		ug/kg	0.74	0.11	1
tert-Butylbenzene	0.31	J	ug/kg	1.5	0.09	1
o-Chlorotoluene	ND		ug/kg	1.5	0.14	1
p-Chlorotoluene	ND		ug/kg	1.5	0.08	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.2	0.74	1
Hexachlorobutadiene	ND		ug/kg	3.0	0.12	1
Isopropylbenzene	7.7		ug/kg	0.74	0.08	1
p-Isopropyltoluene	0.80		ug/kg	0.74	0.08	1
Naphthalene	16		ug/kg	3.0	0.48	1
Acrylonitrile	ND		ug/kg	3.0	0.85	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	12		ug/kg	0.74	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.5	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.5	0.20	1
1,3,5-Trimethylbenzene	0.53	J	ug/kg	1.5	0.14	1
1,2,4-Trimethylbenzene	0.62	J	ug/kg	1.5	0.25	1
1,4-Dioxane	ND		ug/kg	74	26.	1
p-Diethylbenzene	1.9		ug/kg	1.5	0.13	1
p-Ethyltoluene	0.83	J	ug/kg	1.5	0.28	1
1,2,4,5-Tetramethylbenzene	2.9		ug/kg	1.5	0.14	1
Ethyl ether	ND		ug/kg	1.5	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	3.7	1.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 16:36
 Analyst: JC
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	2900	1300	10
1,1-Dichloroethane	ND		ug/kg	570	83.	10
Chloroform	ND		ug/kg	860	80.	10
Carbon tetrachloride	ND		ug/kg	570	130	10
1,2-Dichloropropane	ND		ug/kg	570	72.	10
Dibromochloromethane	ND		ug/kg	570	80.	10
1,1,2-Trichloroethane	ND		ug/kg	570	150	10
Tetrachloroethene	ND		ug/kg	290	110	10
Chlorobenzene	ND		ug/kg	290	73.	10
Trichlorofluoromethane	ND		ug/kg	2300	400	10
1,2-Dichloroethane	ND		ug/kg	570	150	10
1,1,1-Trichloroethane	ND		ug/kg	290	96.	10
Bromodichloromethane	ND		ug/kg	290	62.	10
trans-1,3-Dichloropropene	ND		ug/kg	570	160	10
cis-1,3-Dichloropropene	ND		ug/kg	290	90.	10
1,3-Dichloropropene, Total	ND		ug/kg	290	90.	10
1,1-Dichloropropene	ND		ug/kg	290	91.	10
Bromoform	ND		ug/kg	2300	140	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	290	95.	10
Benzene	2500		ug/kg	290	95.	10
Toluene	360	J	ug/kg	570	310	10
Ethylbenzene	1600		ug/kg	570	81.	10
Chloromethane	ND		ug/kg	2300	530	10
Bromomethane	ND		ug/kg	1100	330	10
Vinyl chloride	ND		ug/kg	570	190	10
Chloroethane	ND		ug/kg	1100	260	10
1,1-Dichloroethene	ND		ug/kg	570	140	10
trans-1,2-Dichloroethene	ND		ug/kg	860	78.	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-07 D

Date Collected: 01/02/19 00:00

Client ID: SODUP03_010219

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	290	78.	10
1,2-Dichlorobenzene	ND		ug/kg	1100	82.	10
1,3-Dichlorobenzene	ND		ug/kg	1100	85.	10
1,4-Dichlorobenzene	ND		ug/kg	1100	98.	10
Methyl tert butyl ether	ND		ug/kg	1100	120	10
p/m-Xylene	1100		ug/kg	1100	320	10
o-Xylene	170	J	ug/kg	570	170	10
Xylenes, Total	1300	J	ug/kg	570	170	10
cis-1,2-Dichloroethene	ND		ug/kg	570	100	10
1,2-Dichloroethene, Total	ND		ug/kg	570	78.	10
Dibromomethane	ND		ug/kg	1100	140	10
Styrene	ND		ug/kg	570	110	10
Dichlorodifluoromethane	ND		ug/kg	5700	520	10
Acetone	ND		ug/kg	5700	2800	10
Carbon disulfide	ND		ug/kg	5700	2600	10
2-Butanone	ND		ug/kg	5700	1300	10
Vinyl acetate	ND		ug/kg	5700	1200	10
4-Methyl-2-pentanone	ND		ug/kg	5700	730	10
1,2,3-Trichloropropane	ND		ug/kg	1100	73.	10
2-Hexanone	ND		ug/kg	5700	680	10
Bromochloromethane	ND		ug/kg	1100	120	10
2,2-Dichloropropane	ND		ug/kg	1100	120	10
1,2-Dibromoethane	ND		ug/kg	570	160	10
1,3-Dichloropropane	ND		ug/kg	1100	96.	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	290	76.	10
Bromobenzene	ND		ug/kg	1100	83.	10
n-Butylbenzene	14000		ug/kg	570	96.	10
sec-Butylbenzene	5300		ug/kg	570	84.	10
tert-Butylbenzene	540	J	ug/kg	1100	68.	10
o-Chlorotoluene	ND		ug/kg	1100	110	10
p-Chlorotoluene	ND		ug/kg	1100	62.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1700	570	10
Hexachlorobutadiene	ND		ug/kg	2300	97.	10
Isopropylbenzene	19000		ug/kg	570	62.	10
p-Isopropyltoluene	710		ug/kg	570	62.	10
Naphthalene	1200	J	ug/kg	2300	370	10
Acrylonitrile	ND		ug/kg	2300	660	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	44000		ug/kg	570	98.	10
1,2,3-Trichlorobenzene	ND		ug/kg	1100	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1100	160	10
1,3,5-Trimethylbenzene	250	J	ug/kg	1100	110	10
1,2,4-Trimethylbenzene	ND		ug/kg	1100	190	10
1,4-Dioxane	ND		ug/kg	57000	20000	10
p-Diethylbenzene	11000		ug/kg	1100	100	10
p-Ethyltoluene	2300		ug/kg	1100	220	10
1,2,4,5-Tetramethylbenzene	36000		ug/kg	1100	110	10
Ethyl ether	ND		ug/kg	1100	200	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	2900	810	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	146	Q	70-130
Dibromofluoromethane	80		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-08
 Client ID: SOTB04_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 18:47
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-08
 Client ID: SOTB04_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.1	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-08
 Client ID: SOTB04_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/19 10:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1194582-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/19 10:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1194582-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/03/19 10:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1194582-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/06/19 11:06
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,05,07 Batch: WG1195272-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	39	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/19 11:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,05,07 Batch: WG1195272-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/06/19 11:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,05,07 Batch: WG1195272-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/06/19 11:06
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1195274-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.77	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/19 11:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1195274-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/06/19 11:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1195274-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1194582-3 WG1194582-4								
Methylene chloride	99		98		70-130	1		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	99		100		70-130	1		20
Carbon tetrachloride	90		88		63-132	2		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	96		95		63-130	1		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	86		85		70-130	1		20
Chlorobenzene	98		99		75-130	1		20
Trichlorofluoromethane	92		90		62-150	2		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	91		89		67-130	2		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	85		85		70-130	0		20
cis-1,3-Dichloropropene	90		91		70-130	1		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	100		95		54-136	5		20
1,1,2,2-Tetrachloroethane	120		110		67-130	9		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	69		72		64-130	4		20
Bromomethane	49		48		39-139	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1194582-3 WG1194582-4								
Vinyl chloride	94		93		55-140	1		20
Chloroethane	100		98		55-138	2		20
1,1-Dichloroethene	92		90		61-145	2		20
trans-1,2-Dichloroethene	96		96		70-130	0		20
Trichloroethene	98		97		70-130	1		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		99		70-130	1		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	85		88		63-130	3		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	98		98		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	120		110		64-130	9		20
Acrylonitrile	120		120		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	56		55		36-147	2		20
Acetone	130		130		58-148	0		20
Carbon disulfide	86		86		51-130	0		20
2-Butanone	140	Q	140	Q	63-138	0		20
Vinyl acetate	130		130		70-130	0		20
4-Methyl-2-pentanone	110		110		59-130	0		20
2-Hexanone	120		120		57-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1194582-3 WG1194582-4								
Bromochloromethane	99		100		70-130	1		20
2,2-Dichloropropane	67		64		63-133	5		20
1,2-Dibromoethane	99		100		70-130	1		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	93		94		64-130	1		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	120		110		53-136	9		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	110		110		70-130	0		20
o-Chlorotoluene	110		110		70-130	0		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	92		94		41-144	2		20
Hexachlorobutadiene	100		98		63-130	2		20
Isopropylbenzene	110		110		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	110		110		70-130	0		20
n-Propylbenzene	120		110		69-130	9		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20
1,2,4-Trichlorobenzene	99		99		70-130	0		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
1,4-Dioxane	120		120		56-162	0		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1194582-3 WG1194582-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	110		100		70-130	10		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	100		100		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	110		112		70-130
Toluene-d8	105		105		70-130
4-Bromofluorobenzene	113		112		70-130
Dibromofluoromethane	98		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05,07 Batch: WG1195272-3 WG1195272-4								
Methylene chloride	97		94		70-130	3		30
1,1-Dichloroethane	102		98		70-130	4		30
Chloroform	102		98		70-130	4		30
Carbon tetrachloride	105		100		70-130	5		30
1,2-Dichloropropane	100		95		70-130	5		30
Dibromochloromethane	104		102		70-130	2		30
1,1,2-Trichloroethane	100		100		70-130	0		30
Tetrachloroethene	108		105		70-130	3		30
Chlorobenzene	105		102		70-130	3		30
Trichlorofluoromethane	96		94		70-139	2		30
1,2-Dichloroethane	99		96		70-130	3		30
1,1,1-Trichloroethane	105		101		70-130	4		30
Bromodichloromethane	102		98		70-130	4		30
trans-1,3-Dichloropropene	104		102		70-130	2		30
cis-1,3-Dichloropropene	102		100		70-130	2		30
1,1-Dichloropropene	107		102		70-130	5		30
Bromoform	106		105		70-130	1		30
1,1,2,2-Tetrachloroethane	101		98		70-130	3		30
Benzene	102		98		70-130	4		30
Toluene	106		103		70-130	3		30
Ethylbenzene	108		104		70-130	4		30
Chloromethane	102		96		52-130	6		30
Bromomethane	98		92		57-147	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05,07 Batch: WG1195272-3 WG1195272-4								
Vinyl chloride	98		93		67-130	5		30
Chloroethane	95		93		50-151	2		30
1,1-Dichloroethene	106		100		65-135	6		30
trans-1,2-Dichloroethene	105		99		70-130	6		30
Trichloroethene	106		100		70-130	6		30
1,2-Dichlorobenzene	108		103		70-130	5		30
1,3-Dichlorobenzene	112		105		70-130	6		30
1,4-Dichlorobenzene	109		104		70-130	5		30
Methyl tert butyl ether	99		98		66-130	1		30
p/m-Xylene	108		105		70-130	3		30
o-Xylene	107		105		70-130	2		30
cis-1,2-Dichloroethene	102		99		70-130	3		30
Dibromomethane	98		97		70-130	1		30
Styrene	108		106		70-130	2		30
Dichlorodifluoromethane	104		95		30-146	9		30
Acetone	96		96		54-140	0		30
Carbon disulfide	98		93		59-130	5		30
2-Butanone	94		94		70-130	0		30
Vinyl acetate	96		95		70-130	1		30
4-Methyl-2-pentanone	94		97		70-130	3		30
1,2,3-Trichloropropane	101		100		68-130	1		30
2-Hexanone	94		96		70-130	2		30
Bromochloromethane	102		99		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05,07 Batch: WG1195272-3 WG1195272-4								
2,2-Dichloropropane	107		102		70-130	5		30
1,2-Dibromoethane	101		102		70-130	1		30
1,3-Dichloropropane	101		101		69-130	0		30
1,1,1,2-Tetrachloroethane	109		105		70-130	4		30
Bromobenzene	112		104		70-130	7		30
n-Butylbenzene	111		106		70-130	5		30
sec-Butylbenzene	112		107		70-130	5		30
tert-Butylbenzene	117		108		70-130	8		30
o-Chlorotoluene	130		123		70-130	6		30
p-Chlorotoluene	112		106		70-130	6		30
1,2-Dibromo-3-chloropropane	100		98		68-130	2		30
Hexachlorobutadiene	107		103		67-130	4		30
Isopropylbenzene	113		108		70-130	5		30
p-Isopropyltoluene	114		108		70-130	5		30
Naphthalene	104		103		70-130	1		30
Acrylonitrile	95		97		70-130	2		30
n-Propylbenzene	115		107		70-130	7		30
1,2,3-Trichlorobenzene	106		102		70-130	4		30
1,2,4-Trichlorobenzene	109		105		70-130	4		30
1,3,5-Trimethylbenzene	113		107		70-130	5		30
1,2,4-Trimethylbenzene	113		107		70-130	5		30
1,4-Dioxane	97		99		65-136	2		30
p-Diethylbenzene	115		107		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05,07 Batch: WG1195272-3 WG1195272-4								
p-Ethyltoluene	113		108		70-130	5		30
1,2,4,5-Tetramethylbenzene	112		107		70-130	5		30
Ethyl ether	101		96		67-130	5		30
trans-1,4-Dichloro-2-butene	104		103		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	89		92		70-130
Toluene-d8	97		99		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	95		95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1195274-3 WG1195274-4								
Methylene chloride	97		94		70-130	3		30
1,1-Dichloroethane	102		98		70-130	4		30
Chloroform	102		98		70-130	4		30
Carbon tetrachloride	105		100		70-130	5		30
1,2-Dichloropropane	100		95		70-130	5		30
Dibromochloromethane	104		102		70-130	2		30
1,1,2-Trichloroethane	100		100		70-130	0		30
Tetrachloroethene	108		105		70-130	3		30
Chlorobenzene	105		102		70-130	3		30
Trichlorofluoromethane	96		94		70-139	2		30
1,2-Dichloroethane	99		96		70-130	3		30
1,1,1-Trichloroethane	105		101		70-130	4		30
Bromodichloromethane	102		98		70-130	4		30
trans-1,3-Dichloropropene	104		102		70-130	2		30
cis-1,3-Dichloropropene	102		100		70-130	2		30
1,1-Dichloropropene	107		102		70-130	5		30
Bromoform	106		105		70-130	1		30
1,1,2,2-Tetrachloroethane	101		98		70-130	3		30
Benzene	102		98		70-130	4		30
Toluene	106		103		70-130	3		30
Ethylbenzene	108		104		70-130	4		30
Chloromethane	102		96		52-130	6		30
Bromomethane	98		92		57-147	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1195274-3 WG1195274-4								
Vinyl chloride	98		93		67-130	5		30
Chloroethane	95		93		50-151	2		30
1,1-Dichloroethene	106		100		65-135	6		30
trans-1,2-Dichloroethene	105		99		70-130	6		30
Trichloroethene	106		100		70-130	6		30
1,2-Dichlorobenzene	108		103		70-130	5		30
1,3-Dichlorobenzene	112		105		70-130	6		30
1,4-Dichlorobenzene	109		104		70-130	5		30
Methyl tert butyl ether	99		98		66-130	1		30
p/m-Xylene	108		105		70-130	3		30
o-Xylene	107		105		70-130	2		30
cis-1,2-Dichloroethene	102		99		70-130	3		30
Dibromomethane	98		97		70-130	1		30
Styrene	108		106		70-130	2		30
Dichlorodifluoromethane	104		95		30-146	9		30
Acetone	96		96		54-140	0		30
Carbon disulfide	98		93		59-130	5		30
2-Butanone	94		94		70-130	0		30
Vinyl acetate	96		95		70-130	1		30
4-Methyl-2-pentanone	94		97		70-130	3		30
1,2,3-Trichloropropane	101		100		68-130	1		30
2-Hexanone	94		96		70-130	2		30
Bromochloromethane	102		99		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1195274-3 WG1195274-4								
2,2-Dichloropropane	107		102		70-130	5		30
1,2-Dibromoethane	101		102		70-130	1		30
1,3-Dichloropropane	101		101		69-130	0		30
1,1,1,2-Tetrachloroethane	109		105		70-130	4		30
Bromobenzene	112		104		70-130	7		30
n-Butylbenzene	111		106		70-130	5		30
sec-Butylbenzene	112		107		70-130	5		30
tert-Butylbenzene	117		108		70-130	8		30
o-Chlorotoluene	130		123		70-130	6		30
p-Chlorotoluene	112		106		70-130	6		30
1,2-Dibromo-3-chloropropane	100		98		68-130	2		30
Hexachlorobutadiene	107		103		67-130	4		30
Isopropylbenzene	113		108		70-130	5		30
p-Isopropyltoluene	114		108		70-130	5		30
Naphthalene	104		103		70-130	1		30
Acrylonitrile	95		97		70-130	2		30
n-Propylbenzene	115		107		70-130	7		30
1,2,3-Trichlorobenzene	106		102		70-130	4		30
1,2,4-Trichlorobenzene	109		105		70-130	4		30
1,3,5-Trimethylbenzene	113		107		70-130	5		30
1,2,4-Trimethylbenzene	113		107		70-130	5		30
1,4-Dioxane	97		99		65-136	2		30
p-Diethylbenzene	115		107		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1195274-3 WG1195274-4								
p-Ethyltoluene	113		108		70-130	5		30
1,2,4,5-Tetramethylbenzene	112		107		70-130	5		30
Ethyl ether	101		96		67-130	5		30
trans-1,4-Dichloro-2-butene	104		103		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	89		91		70-130
Toluene-d8	97		99		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	94		95		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 17:45
 Analyst: SZ
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	200		ug/kg	130	17.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	30.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	29.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	5300		ug/kg	100	19.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	150	1
Hexachloroethane	ND		ug/kg	130	27.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	130	J	ug/kg	170	20.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	130	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	58.	1
Butyl benzyl phthalate	ND		ug/kg	170	42.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	57.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-01

Date Collected: 01/02/19 13:40

Client ID: RB09_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	35.	1
Benzo(a)anthracene	2700		ug/kg	100	19.	1
Benzo(a)pyrene	2400		ug/kg	130	41.	1
Benzo(b)fluoranthene	3000		ug/kg	100	28.	1
Benzo(k)fluoranthene	990		ug/kg	100	27.	1
Chrysene	2500		ug/kg	100	18.	1
Acenaphthylene	130		ug/kg	130	26.	1
Anthracene	700		ug/kg	100	33.	1
Benzo(ghi)perylene	1400		ug/kg	130	20.	1
Fluorene	180		ug/kg	170	16.	1
Phenanthrene	3200		ug/kg	100	20.	1
Dibenzo(a,h)anthracene	380		ug/kg	100	19.	1
Indeno(1,2,3-cd)pyrene	1500		ug/kg	130	24.	1
Pyrene	4700		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	380	39.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	32.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	110	J	ug/kg	170	16.	1
2-Methylnaphthalene	53	J	ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	360	63.	1
4-Nitrophenol	ND		ug/kg	240	69.	1
2,4-Dinitrophenol	ND		ug/kg	810	78.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	81.	1
Pentachlorophenol	ND		ug/kg	130	37.	1
Phenol	ND		ug/kg	170	25.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	32.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	250		ug/kg	170	16.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	86		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	80		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 17:19
 Analyst: SZ
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	74	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	330		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	6400		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-02

Date Collected: 01/02/19 13:45

Client ID: RB09_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	140		ug/kg	110	21.	1
Benzo(a)pyrene	110	J	ug/kg	150	46.	1
Benzo(b)fluoranthene	130		ug/kg	110	32.	1
Benzo(k)fluoranthene	44	J	ug/kg	110	30.	1
Chrysene	130		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	100	J	ug/kg	110	37.	1
Benzo(ghi)perylene	82	J	ug/kg	150	22.	1
Fluorene	100	J	ug/kg	190	18.	1
Phenanthrene	400		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	69	J	ug/kg	150	26.	1
Pyrene	320		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	47	J	ug/kg	190	18.	1
2-Methylnaphthalene	7600		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	910	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	27	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		25-120
Phenol-d6	91		10-120
Nitrobenzene-d5	115		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	92		10-136
4-Terphenyl-d14	81		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 16:02
 Analyst: SZ
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	200	19.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	49.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	66.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	ND		ug/kg	200	18.	1
2-Methylnaphthalene	ND		ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	200	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	37.	1
Benzoic Acid	ND		ug/kg	630	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	ND		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	90		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	92		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	85		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 18:10
 Analyst: SZ
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	58	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	17.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	920		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	630		ug/kg	180	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	340		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	410		ug/kg	100	20.	1
Benzo(a)pyrene	350		ug/kg	140	43.	1
Benzo(b)fluoranthene	470		ug/kg	100	30.	1
Benzo(k)fluoranthene	140		ug/kg	100	28.	1
Chrysene	370		ug/kg	100	18.	1
Acenaphthylene	30	J	ug/kg	140	27.	1
Anthracene	230		ug/kg	100	34.	1
Benzo(ghi)perylene	310		ug/kg	140	21.	1
Fluorene	69	J	ug/kg	180	17.	1
Phenanthrene	950		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	64	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	270		ug/kg	140	24.	1
Pyrene	830		ug/kg	100	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	51	J	ug/kg	180	17.	1
2-Methylnaphthalene	720		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	42	J	ug/kg	180	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	96		30-120
2,4,6-Tribromophenol	11		10-136
4-Terphenyl-d14	86		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 16:54
 Analyst: SZ
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	27	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	64	J	ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	1900		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-05

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	33	J	ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	32	J	ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	28	J	ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	26	J	ug/kg	150	22.	1
Fluorene	65	J	ug/kg	190	18.	1
Phenanthrene	100	J	ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	72	J	ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	10000	E	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	112		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	86		10-136
4-Terphenyl-d14	74		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05 D
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/08/19 12:49
 Analyst: JG
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2-Methylnaphthalene	9500		ug/kg	1100	120	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 16:28
 Analyst: SZ
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	220		ug/kg	180	63.	1
Butyl benzyl phthalate	96	J	ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	28	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	260	74.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	88.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	91		25-120
Phenol-d6	90		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	91		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	85		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 18:36
 Analyst: SZ
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	670		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	16000	E	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	270		ug/kg	120	22.	1
Benzo(a)pyrene	210		ug/kg	150	47.	1
Benzo(b)fluoranthene	250		ug/kg	120	32.	1
Benzo(k)fluoranthene	83	J	ug/kg	120	31.	1
Chrysene	250		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	200		ug/kg	120	38.	1
Benzo(ghi)perylene	140	J	ug/kg	150	23.	1
Fluorene	190		ug/kg	190	19.	1
Phenanthrene	830		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	35	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	120	J	ug/kg	150	27.	1
Pyrene	660		ug/kg	120	19.	1
Biphenyl	130	J	ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	93	J	ug/kg	190	18.	1
2-Methylnaphthalene	18000	E	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	920	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	200	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	40	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	88		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	101		30-120
2,4,6-Tribromophenol	93		10-136
4-Terphenyl-d14	89		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/08/19 12:23
 Analyst: JG
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	21000		ug/kg	960	120	5
2-Methylnaphthalene	19000		ug/kg	1200	120	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/19 20:30
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 01/03/19 16:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1194535-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 01/04/19 20:30
 Analyst: RC

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1194535-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/04/19 20:30
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 01/03/19 16:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1194535-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	95		25-120
Phenol-d6	99		10-120
Nitrobenzene-d5	99		23-120
2-Fluorobiphenyl	110		30-120
2,4,6-Tribromophenol	116		10-136
4-Terphenyl-d14	117		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1194535-2 WG1194535-3								
Acenaphthene	88		90		31-137	2		50
1,2,4-Trichlorobenzene	97		102		38-107	5		50
Hexachlorobenzene	104		109		40-140	5		50
Bis(2-chloroethyl)ether	90		95		40-140	5		50
2-Chloronaphthalene	105		109		40-140	4		50
1,2-Dichlorobenzene	90		92		40-140	2		50
1,3-Dichlorobenzene	88		91		40-140	3		50
1,4-Dichlorobenzene	89		92		28-104	3		50
3,3'-Dichlorobenzidine	65		66		40-140	2		50
2,4-Dinitrotoluene	96		99		40-132	3		50
2,6-Dinitrotoluene	111		116		40-140	4		50
Fluoranthene	106		111		40-140	5		50
4-Chlorophenyl phenyl ether	95		98		40-140	3		50
4-Bromophenyl phenyl ether	102		106		40-140	4		50
Bis(2-chloroisopropyl)ether	87		90		40-140	3		50
Bis(2-chloroethoxy)methane	95		101		40-117	6		50
Hexachlorobutadiene	105		110		40-140	5		50
Hexachlorocyclopentadiene	89		93		40-140	4		50
Hexachloroethane	87		88		40-140	1		50
Isophorone	96		100		40-140	4		50
Naphthalene	96		98		40-140	2		50
Nitrobenzene	90		95		40-140	5		50
NDPA/DPA	100		98		36-157	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1194535-2 WG1194535-3								
n-Nitrosodi-n-propylamine	93		97		32-121	4		50
Bis(2-ethylhexyl)phthalate	102		106		40-140	4		50
Butyl benzyl phthalate	105		111		40-140	6		50
Di-n-butylphthalate	109		112		40-140	3		50
Di-n-octylphthalate	103		110		40-140	7		50
Diethyl phthalate	94		96		40-140	2		50
Dimethyl phthalate	114		117		40-140	3		50
Benzo(a)anthracene	99		104		40-140	5		50
Benzo(a)pyrene	107		112		40-140	5		50
Benzo(b)fluoranthene	107		108		40-140	1		50
Benzo(k)fluoranthene	106		117		40-140	10		50
Chrysene	102		106		40-140	4		50
Acenaphthylene	110		114		40-140	4		50
Anthracene	105		109		40-140	4		50
Benzo(ghi)perylene	108		112		40-140	4		50
Fluorene	96		98		40-140	2		50
Phenanthrene	100		104		40-140	4		50
Dibenzo(a,h)anthracene	109		114		40-140	4		50
Indeno(1,2,3-cd)pyrene	108		112		40-140	4		50
Pyrene	108		112		35-142	4		50
Biphenyl	106	Q	110	Q	54-104	4		50
4-Chloroaniline	54		61		40-140	12		50
2-Nitroaniline	110		116		47-134	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1194535-2 WG1194535-3								
3-Nitroaniline	58		63		26-129	8		50
4-Nitroaniline	86		87		41-125	1		50
Dibenzofuran	93		95		40-140	2		50
2-Methylnaphthalene	100		104		40-140	4		50
1,2,4,5-Tetrachlorobenzene	108		112		40-117	4		50
Acetophenone	93		99		14-144	6		50
2,4,6-Trichlorophenol	113		119		30-130	5		50
p-Chloro-m-cresol	110	Q	117	Q	26-103	6		50
2-Chlorophenol	97		102		25-102	5		50
2,4-Dichlorophenol	110		114		30-130	4		50
2,4-Dimethylphenol	107		110		30-130	3		50
2-Nitrophenol	98		101		30-130	3		50
4-Nitrophenol	104		106		11-114	2		50
2,4-Dinitrophenol	82		83		4-130	1		50
4,6-Dinitro-o-cresol	97		100		10-130	3		50
Pentachlorophenol	93		96		17-109	3		50
Phenol	94	Q	98	Q	26-90	4		50
2-Methylphenol	98		103		30-130.	5		50
3-Methylphenol/4-Methylphenol	99		103		30-130	4		50
2,4,5-Trichlorophenol	122		126		30-130	3		50
Benzoic Acid	60		63		10-110	5		50
Benzyl Alcohol	102		106		40-140	4		50
Carbazole	103		108		54-128	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1194535-2 WG1194535-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	93		96		25-120
Phenol-d6	99		102		10-120
Nitrobenzene-d5	95		97		23-120
2-Fluorobiphenyl	110		112		30-120
2,4,6-Tribromophenol	115		113		10-136
4-Terphenyl-d14	111		113		18-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 13:44
 Analyst: WR
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.1	2.94	1	A
Aroclor 1221	ND		ug/kg	33.1	3.32	1	A
Aroclor 1232	ND		ug/kg	33.1	7.02	1	A
Aroclor 1242	ND		ug/kg	33.1	4.46	1	A
Aroclor 1248	ND		ug/kg	33.1	4.97	1	A
Aroclor 1254	ND		ug/kg	33.1	3.62	1	A
Aroclor 1260	ND		ug/kg	33.1	6.12	1	A
Aroclor 1262	ND		ug/kg	33.1	4.20	1	A
Aroclor 1268	ND		ug/kg	33.1	3.43	1	A
PCBs, Total	ND		ug/kg	33.1	2.94	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 13:57
 Analyst: WR
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.4	3.32	1	A
Aroclor 1221	ND		ug/kg	37.4	3.75	1	A
Aroclor 1232	ND		ug/kg	37.4	7.93	1	A
Aroclor 1242	ND		ug/kg	37.4	5.04	1	A
Aroclor 1248	ND		ug/kg	37.4	5.61	1	A
Aroclor 1254	ND		ug/kg	37.4	4.09	1	A
Aroclor 1260	ND		ug/kg	37.4	6.91	1	A
Aroclor 1262	ND		ug/kg	37.4	4.75	1	A
Aroclor 1268	ND		ug/kg	37.4	3.87	1	A
PCBs, Total	ND		ug/kg	37.4	3.32	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	83		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 14:09
 Analyst: WR
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.3	3.49	1	A
Aroclor 1221	ND		ug/kg	39.3	3.94	1	A
Aroclor 1232	ND		ug/kg	39.3	8.34	1	A
Aroclor 1242	ND		ug/kg	39.3	5.30	1	A
Aroclor 1248	ND		ug/kg	39.3	5.90	1	A
Aroclor 1254	ND		ug/kg	39.3	4.30	1	A
Aroclor 1260	ND		ug/kg	39.3	7.27	1	A
Aroclor 1262	ND		ug/kg	39.3	5.00	1	A
Aroclor 1268	ND		ug/kg	39.3	4.08	1	A
PCBs, Total	ND		ug/kg	39.3	3.49	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 17:03
 Analyst: WR
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.1	3.11	1	A
Aroclor 1221	ND		ug/kg	35.1	3.51	1	A
Aroclor 1232	ND		ug/kg	35.1	7.43	1	A
Aroclor 1242	ND		ug/kg	35.1	4.73	1	A
Aroclor 1248	ND		ug/kg	35.1	5.26	1	A
Aroclor 1254	18.5	J	ug/kg	35.1	3.84	1	B
Aroclor 1260	11.7	J	ug/kg	35.1	6.48	1	A
Aroclor 1262	ND		ug/kg	35.1	4.45	1	A
Aroclor 1268	ND		ug/kg	35.1	3.63	1	A
PCBs, Total	30.2	J	ug/kg	35.1	3.11	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 17:16
 Analyst: WR
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.3	3.31	1	A
Aroclor 1221	ND		ug/kg	37.3	3.74	1	A
Aroclor 1232	ND		ug/kg	37.3	7.91	1	A
Aroclor 1242	ND		ug/kg	37.3	5.03	1	A
Aroclor 1248	ND		ug/kg	37.3	5.59	1	A
Aroclor 1254	ND		ug/kg	37.3	4.08	1	A
Aroclor 1260	ND		ug/kg	37.3	6.89	1	A
Aroclor 1262	ND		ug/kg	37.3	4.74	1	A
Aroclor 1268	ND		ug/kg	37.3	3.86	1	A
PCBs, Total	ND		ug/kg	37.3	3.31	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 17:28
 Analyst: WR
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.7	3.08	1	A
Aroclor 1221	ND		ug/kg	34.7	3.48	1	A
Aroclor 1232	ND		ug/kg	34.7	7.36	1	A
Aroclor 1242	ND		ug/kg	34.7	4.68	1	A
Aroclor 1248	ND		ug/kg	34.7	5.21	1	A
Aroclor 1254	ND		ug/kg	34.7	3.80	1	A
Aroclor 1260	ND		ug/kg	34.7	6.42	1	A
Aroclor 1262	ND		ug/kg	34.7	4.41	1	A
Aroclor 1268	ND		ug/kg	34.7	3.60	1	A
PCBs, Total	ND		ug/kg	34.7	3.08	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07
Client ID: SODUP03_010219
Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/04/19 17:40
Analyst: WR
Percent Solids: 85%

Extraction Method: EPA 3546
Extraction Date: 01/03/19 14:12
Cleanup Method: EPA 3665A
Cleanup Date: 01/04/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.6	3.43	1	A
Aroclor 1221	ND		ug/kg	38.6	3.87	1	A
Aroclor 1232	ND		ug/kg	38.6	8.19	1	A
Aroclor 1242	ND		ug/kg	38.6	5.21	1	A
Aroclor 1248	ND		ug/kg	38.6	5.80	1	A
Aroclor 1254	ND		ug/kg	38.6	4.23	1	A
Aroclor 1260	ND		ug/kg	38.6	7.14	1	A
Aroclor 1262	ND		ug/kg	38.6	4.91	1	A
Aroclor 1268	ND		ug/kg	38.6	4.00	1	A
PCBs, Total	ND		ug/kg	38.6	3.43	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/04/19 16:13
 Analyst: WR

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-07 Batch: WG1194469-1						
Aroclor 1016	ND		ug/kg	31.3	2.78	A
Aroclor 1221	ND		ug/kg	31.3	3.14	A
Aroclor 1232	ND		ug/kg	31.3	6.64	A
Aroclor 1242	ND		ug/kg	31.3	4.22	A
Aroclor 1248	ND		ug/kg	31.3	4.70	A
Aroclor 1254	ND		ug/kg	31.3	3.43	A
Aroclor 1260	ND		ug/kg	31.3	5.79	A
Aroclor 1262	ND		ug/kg	31.3	3.98	A
Aroclor 1268	ND		ug/kg	31.3	3.25	A
PCBs, Total	ND		ug/kg	31.3	2.78	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	79		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1194469-2 WG1194469-3									
Aroclor 1016	74		78		40-140	5		50	A
Aroclor 1260	69		72		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		72		30-150	A
Decachlorobiphenyl	69		74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		75		30-150	B
Decachlorobiphenyl	79		79		30-150	B



PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 19:09
 Analyst: BM
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.57	0.307	1	A
Lindane	ND		ug/kg	0.653	0.292	1	A
Alpha-BHC	ND		ug/kg	0.653	0.186	1	A
Beta-BHC	ND		ug/kg	1.57	0.595	1	A
Heptachlor	ND		ug/kg	0.784	0.352	1	A
Aldrin	ND		ug/kg	1.57	0.552	1	A
Heptachlor epoxide	ND		ug/kg	2.94	0.882	1	A
Endrin	ND		ug/kg	0.653	0.268	1	A
Endrin aldehyde	ND		ug/kg	1.96	0.686	1	A
Endrin ketone	ND		ug/kg	1.57	0.404	1	A
Dieldrin	ND		ug/kg	0.980	0.490	1	A
4,4'-DDE	ND		ug/kg	1.57	0.363	1	A
4,4'-DDD	ND		ug/kg	1.57	0.559	1	A
4,4'-DDT	ND		ug/kg	2.94	1.26	1	A
Endosulfan I	ND		ug/kg	1.57	0.370	1	A
Endosulfan II	ND		ug/kg	1.57	0.524	1	A
Endosulfan sulfate	ND		ug/kg	0.653	0.311	1	A
Methoxychlor	ND		ug/kg	2.94	0.915	1	A
Toxaphene	ND		ug/kg	29.4	8.23	1	A
cis-Chlordane	ND		ug/kg	1.96	0.546	1	A
trans-Chlordane	ND		ug/kg	1.96	0.518	1	A
Chlordane	ND		ug/kg	12.7	5.20	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-01

Date Collected: 01/02/19 13:40

Client ID: RB09_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	77		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 11:59
 Analyst: DGM
 Percent Solids: 96%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	172	10.8	1	A
2,4,5-T	ND		ug/kg	172	5.33	1	A
2,4,5-TP (Silvex)	ND		ug/kg	172	4.58	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	134		30-150	A
DCAA	108		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 19:21
 Analyst: BM
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.351	1	A
Lindane	ND		ug/kg	0.746	0.334	1	A
Alpha-BHC	ND		ug/kg	0.746	0.212	1	A
Beta-BHC	ND		ug/kg	1.79	0.679	1	A
Heptachlor	ND		ug/kg	0.895	0.401	1	A
Aldrin	ND		ug/kg	1.79	0.630	1	A
Heptachlor epoxide	ND		ug/kg	3.36	1.01	1	A
Endrin	ND		ug/kg	0.746	0.306	1	A
Endrin aldehyde	ND		ug/kg	2.24	0.783	1	A
Endrin ketone	ND		ug/kg	1.79	0.461	1	A
Dieldrin	ND		ug/kg	1.12	0.560	1	A
4,4'-DDE	ND		ug/kg	1.79	0.414	1	A
4,4'-DDD	ND		ug/kg	1.79	0.639	1	A
4,4'-DDT	ND		ug/kg	3.36	1.44	1	A
Endosulfan I	ND		ug/kg	1.79	0.423	1	A
Endosulfan II	ND		ug/kg	1.79	0.598	1	A
Endosulfan sulfate	ND		ug/kg	0.746	0.355	1	A
Methoxychlor	ND		ug/kg	3.36	1.04	1	A
Toxaphene	ND		ug/kg	33.6	9.40	1	A
cis-Chlordane	ND		ug/kg	2.24	0.624	1	A
trans-Chlordane	ND		ug/kg	2.24	0.591	1	A
Chlordane	ND		ug/kg	14.5	5.93	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-02

Date Collected: 01/02/19 13:45

Client ID: RB09_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	55		30-150	B
2,4,5,6-Tetrachloro-m-xylene	204	Q	30-150	A
Decachlorobiphenyl	76		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 12:18
 Analyst: DGM
 Percent Solids: 85%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	193	12.1	1	A
2,4,5-T	ND		ug/kg	193	5.97	1	A
2,4,5-TP (Silvex)	ND		ug/kg	193	5.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	187	Q	30-150	A
DCAA	148		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 19:34
 Analyst: BM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.87	0.367	1	A
Lindane	ND		ug/kg	0.780	0.349	1	A
Alpha-BHC	ND		ug/kg	0.780	0.222	1	A
Beta-BHC	ND		ug/kg	1.87	0.710	1	A
Heptachlor	ND		ug/kg	0.936	0.420	1	A
Aldrin	ND		ug/kg	1.87	0.659	1	A
Heptachlor epoxide	ND		ug/kg	3.51	1.05	1	A
Endrin	ND		ug/kg	0.780	0.320	1	A
Endrin aldehyde	ND		ug/kg	2.34	0.819	1	A
Endrin ketone	ND		ug/kg	1.87	0.482	1	A
Dieldrin	ND		ug/kg	1.17	0.585	1	A
4,4'-DDE	ND		ug/kg	1.87	0.433	1	A
4,4'-DDD	ND		ug/kg	1.87	0.668	1	A
4,4'-DDT	ND		ug/kg	3.51	1.50	1	A
Endosulfan I	ND		ug/kg	1.87	0.442	1	A
Endosulfan II	ND		ug/kg	1.87	0.626	1	A
Endosulfan sulfate	ND		ug/kg	0.780	0.371	1	A
Methoxychlor	ND		ug/kg	3.51	1.09	1	A
Toxaphene	ND		ug/kg	35.1	9.83	1	A
cis-Chlordane	ND		ug/kg	2.34	0.652	1	A
trans-Chlordane	ND		ug/kg	2.34	0.618	1	A
Chlordane	ND		ug/kg	15.2	6.20	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	95		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	74		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 12:37
 Analyst: DGM
 Percent Solids: 83%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	199	12.5	1	A
2,4,5-T	ND		ug/kg	199	6.17	1	A
2,4,5-TP (Silvex)	ND		ug/kg	199	5.29	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	117		30-150	A
DCAA	102		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 15:35
 Analyst: SL
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.63	0.319	1	A
Lindane	ND		ug/kg	0.679	0.303	1	A
Alpha-BHC	ND		ug/kg	0.679	0.193	1	A
Beta-BHC	ND		ug/kg	1.63	0.618	1	A
Heptachlor	ND		ug/kg	0.814	0.365	1	A
Aldrin	ND		ug/kg	1.63	0.574	1	A
Heptachlor epoxide	ND		ug/kg	3.05	0.916	1	A
Endrin	ND		ug/kg	0.679	0.278	1	A
Endrin aldehyde	ND		ug/kg	2.04	0.713	1	A
Endrin ketone	ND		ug/kg	1.63	0.419	1	A
Dieldrin	0.531	JIP	ug/kg	1.02	0.509	1	B
4,4'-DDE	ND		ug/kg	1.63	0.377	1	A
4,4'-DDD	1.42	J	ug/kg	1.63	0.581	1	B
4,4'-DDT	1.56	JIP	ug/kg	3.05	1.31	1	B
Endosulfan I	ND		ug/kg	1.63	0.385	1	A
Endosulfan II	ND		ug/kg	1.63	0.544	1	A
Endosulfan sulfate	ND		ug/kg	0.679	0.323	1	A
Methoxychlor	ND		ug/kg	3.05	0.950	1	A
Toxaphene	ND		ug/kg	30.5	8.55	1	A
cis-Chlordane	ND		ug/kg	2.04	0.567	1	A
trans-Chlordane	0.935	JIP	ug/kg	2.04	0.538	1	A
Chlordane	ND		ug/kg	13.2	5.40	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-04

Date Collected: 01/02/19 10:30

Client ID: RB11_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	63		30-150	B
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	60		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 12:55
 Analyst: DGM
 Percent Solids: 93%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	178	11.2	1	A
2,4,5-T	ND		ug/kg	178	5.53	1	A
2,4,5-TP (Silvex)	ND		ug/kg	178	4.75	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	120		30-150	A
DCAA	107		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 13:14
 Analyst: DGM
 Percent Solids: 85%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	193	12.1	1	A
2,4,5-T	ND		ug/kg	193	5.97	1	A
2,4,5-TP (Silvex)	ND		ug/kg	193	5.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	125		30-150	A
DCAA	114		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05 D
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/08/19 17:03
 Analyst: SL
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	91.9	18.0	50	A
Lindane	ND		ug/kg	38.3	17.1	50	A
Alpha-BHC	ND		ug/kg	38.3	10.9	50	A
Beta-BHC	ND		ug/kg	91.9	34.8	50	A
Heptachlor	ND		ug/kg	46.0	20.6	50	A
Aldrin	ND		ug/kg	91.9	32.4	50	A
Heptachlor epoxide	ND		ug/kg	172	51.7	50	A
Endrin	ND		ug/kg	38.3	15.7	50	A
Endrin aldehyde	ND		ug/kg	115	40.2	50	A
Endrin ketone	ND		ug/kg	91.9	23.7	50	A
Dieldrin	ND		ug/kg	57.4	28.7	50	A
4,4'-DDE	ND		ug/kg	91.9	21.2	50	A
4,4'-DDD	ND		ug/kg	91.9	32.8	50	A
4,4'-DDT	ND		ug/kg	172	73.9	50	A
Endosulfan I	ND		ug/kg	91.9	21.7	50	A
Endosulfan II	ND		ug/kg	91.9	30.7	50	A
Endosulfan sulfate	ND		ug/kg	38.3	18.2	50	A
Methoxychlor	ND		ug/kg	172	53.6	50	A
Toxaphene	ND		ug/kg	1720	482.	50	A
cis-Chlordane	ND		ug/kg	115	32.0	50	A
trans-Chlordane	ND		ug/kg	115	30.3	50	A
Chlordane	ND		ug/kg	747	304.	50	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-05 D

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 16:00
 Analyst: SL
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.334	1	A
Lindane	ND		ug/kg	0.710	0.318	1	A
Alpha-BHC	ND		ug/kg	0.710	0.202	1	A
Beta-BHC	ND		ug/kg	1.70	0.646	1	A
Heptachlor	ND		ug/kg	0.852	0.382	1	A
Aldrin	ND		ug/kg	1.70	0.600	1	A
Heptachlor epoxide	ND		ug/kg	3.20	0.959	1	A
Endrin	ND		ug/kg	0.710	0.291	1	A
Endrin aldehyde	ND		ug/kg	2.13	0.746	1	A
Endrin ketone	ND		ug/kg	1.70	0.439	1	A
Dieldrin	ND		ug/kg	1.06	0.533	1	A
4,4'-DDE	ND		ug/kg	1.70	0.394	1	A
4,4'-DDD	ND		ug/kg	1.70	0.608	1	A
4,4'-DDT	ND		ug/kg	3.20	1.37	1	A
Endosulfan I	ND		ug/kg	1.70	0.403	1	A
Endosulfan II	ND		ug/kg	1.70	0.570	1	A
Endosulfan sulfate	ND		ug/kg	0.710	0.338	1	A
Methoxychlor	ND		ug/kg	3.20	0.994	1	A
Toxaphene	ND		ug/kg	32.0	8.95	1	A
cis-Chlordane	ND		ug/kg	2.13	0.594	1	A
trans-Chlordane	ND	IP	ug/kg	2.13	0.563	1	A
Chlordane	ND		ug/kg	13.8	5.65	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	B
Decachlorobiphenyl	67		30-150	B
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	70		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 13:33
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.67	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	125		30-150	A
DCAA	112		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/08/19 17:15
 Analyst: SL
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	90.0	17.6	50	A
Lindane	ND		ug/kg	37.5	16.8	50	A
Alpha-BHC	ND		ug/kg	37.5	10.6	50	A
Beta-BHC	ND		ug/kg	90.0	34.1	50	A
Heptachlor	ND		ug/kg	45.0	20.2	50	A
Aldrin	ND		ug/kg	90.0	31.7	50	A
Heptachlor epoxide	ND		ug/kg	169	50.6	50	A
Endrin	ND		ug/kg	37.5	15.4	50	A
Endrin aldehyde	ND		ug/kg	112	39.4	50	A
Endrin ketone	ND		ug/kg	90.0	23.2	50	A
Dieldrin	ND		ug/kg	56.2	28.1	50	A
4,4'-DDE	ND		ug/kg	90.0	20.8	50	A
4,4'-DDD	ND		ug/kg	90.0	32.1	50	A
4,4'-DDT	ND		ug/kg	169	72.3	50	A
Endosulfan I	ND		ug/kg	90.0	21.2	50	A
Endosulfan II	ND		ug/kg	90.0	30.0	50	A
Endosulfan sulfate	ND		ug/kg	37.5	17.8	50	A
Methoxychlor	ND		ug/kg	169	52.5	50	A
Toxaphene	ND		ug/kg	1690	472.	50	A
cis-Chlordane	ND		ug/kg	112	31.3	50	A
trans-Chlordane	ND		ug/kg	112	29.7	50	A
Chlordane	ND		ug/kg	731	298.	50	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-07 D

Date Collected: 01/02/19 00:00

Client ID: SODUP03_010219

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/07/19 16:52
 Analyst: DGM
 Percent Solids: 85%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	958	60.4	5	A
2,4,5-T	ND		ug/kg	958	29.7	5	A
2,4,5-TP (Silvex)	ND		ug/kg	958	25.5	5	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	0	Q	30-150	A
DCAA	0	Q	30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/04/19 15:31
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 01/03/19 12:46
Cleanup Method: EPA 3620B
Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07 Batch: WG1194454-1						
Delta-BHC	ND		ug/kg	1.52	0.298	A
Lindane	ND		ug/kg	0.634	0.283	A
Alpha-BHC	ND		ug/kg	0.634	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.577	A
Heptachlor	ND		ug/kg	0.761	0.341	A
Aldrin	ND		ug/kg	1.52	0.536	A
Heptachlor epoxide	ND		ug/kg	2.85	0.856	A
Endrin	ND		ug/kg	0.634	0.260	A
Endrin aldehyde	ND		ug/kg	1.90	0.666	A
Endrin ketone	ND		ug/kg	1.52	0.392	A
Dieldrin	ND		ug/kg	0.951	0.476	A
4,4'-DDE	ND		ug/kg	1.52	0.352	A
4,4'-DDD	ND		ug/kg	1.52	0.543	A
4,4'-DDT	ND		ug/kg	2.85	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.360	A
Endosulfan II	ND		ug/kg	1.52	0.508	A
Endosulfan sulfate	ND		ug/kg	0.634	0.302	A
Methoxychlor	ND		ug/kg	2.85	0.888	A
Toxaphene	ND		ug/kg	28.5	7.99	A
cis-Chlordane	ND		ug/kg	1.90	0.530	A
trans-Chlordane	ND		ug/kg	1.90	0.502	A
Chlordane	ND		ug/kg	12.4	5.04	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/04/19 15:31
 Analyst: BM

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:46
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07 Batch: WG1194454-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	105		30-150	B
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	100		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/04/19 11:00
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Methylation Date: 01/04/19 10:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-07 Batch: WG1194518-1						
2,4-D	ND		ug/kg	163	10.2	A
2,4,5-T	ND		ug/kg	163	5.04	A
2,4,5-TP (Silvex)	ND		ug/kg	163	4.33	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	98		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1194454-2 WG1194454-3									
Delta-BHC	61		95		30-150	44	Q	30	A
Lindane	63		99		30-150	44	Q	30	A
Alpha-BHC	66		109		30-150	49	Q	30	A
Beta-BHC	63		91		30-150	36	Q	30	A
Heptachlor	67		105		30-150	44	Q	30	A
Aldrin	63		97		30-150	43	Q	30	A
Heptachlor epoxide	62		95		30-150	42	Q	30	A
Endrin	68		105		30-150	43	Q	30	A
Endrin aldehyde	47		74		30-150	45	Q	30	A
Endrin ketone	63		96		30-150	42	Q	30	A
Dieldrin	69		110		30-150	46	Q	30	A
4,4'-DDE	64		93		30-150	37	Q	30	A
4,4'-DDD	64		102		30-150	46	Q	30	A
4,4'-DDT	63		101		30-150	46	Q	30	A
Endosulfan I	61		92		30-150	41	Q	30	A
Endosulfan II	60		94		30-150	44	Q	30	A
Endosulfan sulfate	56		81		30-150	36	Q	30	A
Methoxychlor	56		90		30-150	47	Q	30	A
cis-Chlordane	48		67		30-150	33	Q	30	A
trans-Chlordane	38		63		30-150	50	Q	30	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1194454-2 WG1194454-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	61		80		30-150	B
Decachlorobiphenyl	79		97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	58		89		30-150	A
Decachlorobiphenyl	62		94		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1194518-2 WG1194518-3									
2,4-D	133		117		30-150	13		30	A
2,4,5-T	116		114		30-150	2		30	A
2,4,5-TP (Silvex)	87		90		30-150	3		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	114		116		30-150	A
DCAA	106		107		30-150	B



METALS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-01

Date Collected: 01/02/19 13:40

Client ID: RB09_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3430		mg/kg	8.20	2.21	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Antimony, Total	0.402	J	mg/kg	4.10	0.312	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Arsenic, Total	3.98		mg/kg	0.820	0.171	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Barium, Total	97.9		mg/kg	0.820	0.143	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.410	0.027	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Cadmium, Total	0.476	J	mg/kg	0.820	0.080	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Calcium, Total	2320		mg/kg	8.20	2.87	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Chromium, Total	9.35		mg/kg	0.820	0.079	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Cobalt, Total	3.88		mg/kg	1.64	0.136	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Copper, Total	68.2		mg/kg	0.820	0.212	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Iron, Total	11000		mg/kg	4.10	0.741	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Lead, Total	569		mg/kg	4.10	0.220	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Magnesium, Total	1370		mg/kg	8.20	1.26	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Manganese, Total	171		mg/kg	0.820	0.130	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Mercury, Total	0.242		mg/kg	0.066	0.014	1	01/03/19 07:30	01/04/19 18:48	EPA 7471B	1,7471B	EA
Nickel, Total	8.91		mg/kg	2.05	0.198	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Potassium, Total	878		mg/kg	205	11.8	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Selenium, Total	0.566	J	mg/kg	1.64	0.212	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Silver, Total	0.279	J	mg/kg	0.820	0.232	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Sodium, Total	657		mg/kg	164	2.58	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.64	0.258	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Vanadium, Total	11.2		mg/kg	0.820	0.166	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Zinc, Total	206		mg/kg	4.10	0.240	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	9.4		mg/kg	0.84	0.84	1		01/07/19 17:03	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02

Date Collected: 01/02/19 13:45

Client ID: RB09_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4520		mg/kg	9.14	2.47	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.57	0.347	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Arsenic, Total	1.76		mg/kg	0.914	0.190	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Barium, Total	27.0		mg/kg	0.914	0.159	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Beryllium, Total	0.110	J	mg/kg	0.457	0.030	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Cadmium, Total	0.201	J	mg/kg	0.914	0.090	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Calcium, Total	1140		mg/kg	9.14	3.20	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Chromium, Total	7.55		mg/kg	0.914	0.088	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Cobalt, Total	3.60		mg/kg	1.83	0.152	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Copper, Total	6.39		mg/kg	0.914	0.236	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Iron, Total	9900		mg/kg	4.57	0.826	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Lead, Total	42.1		mg/kg	4.57	0.245	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Magnesium, Total	2060		mg/kg	9.14	1.41	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Manganese, Total	74.5		mg/kg	0.914	0.145	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.074	0.016	1	01/03/19 07:30	01/04/19 18:49	EPA 7471B	1,7471B	EA
Nickel, Total	7.07		mg/kg	2.29	0.221	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Potassium, Total	409		mg/kg	229	13.2	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Selenium, Total	0.338	J	mg/kg	1.83	0.236	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.914	0.259	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Sodium, Total	48.1	J	mg/kg	183	2.88	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.83	0.288	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Vanadium, Total	10.3		mg/kg	0.914	0.186	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Zinc, Total	23.5		mg/kg	4.57	0.268	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.6		mg/kg	0.94	0.94	1		01/07/19 17:08	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3480		mg/kg	9.45	2.55	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.73	0.359	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Arsenic, Total	1.74		mg/kg	0.945	0.197	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Barium, Total	7.66		mg/kg	0.945	0.164	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Beryllium, Total	0.151	J	mg/kg	0.473	0.031	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Cadmium, Total	0.189	J	mg/kg	0.945	0.093	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Calcium, Total	614		mg/kg	9.45	3.31	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Chromium, Total	6.45		mg/kg	0.945	0.091	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Cobalt, Total	3.52		mg/kg	1.89	0.157	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Copper, Total	5.63		mg/kg	0.945	0.244	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Iron, Total	8480		mg/kg	4.73	0.854	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Lead, Total	3.15	J	mg/kg	4.73	0.253	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Magnesium, Total	1460		mg/kg	9.45	1.46	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Manganese, Total	312		mg/kg	0.945	0.150	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.076	0.016	1	01/03/19 07:30	01/04/19 18:55	EPA 7471B	1,7471B	EA
Nickel, Total	7.29		mg/kg	2.36	0.229	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Potassium, Total	378		mg/kg	236	13.6	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Selenium, Total	0.510	J	mg/kg	1.89	0.244	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.945	0.268	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Sodium, Total	103	J	mg/kg	189	2.98	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.89	0.298	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Vanadium, Total	8.43		mg/kg	0.945	0.192	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Zinc, Total	16.8		mg/kg	4.73	0.277	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	6.4		mg/kg	0.96	0.97	1		01/07/19 17:12	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-04

Date Collected: 01/02/19 10:30

Client ID: RB11_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6870		mg/kg	8.46	2.28	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.23	0.322	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Arsenic, Total	4.05		mg/kg	0.846	0.176	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Barium, Total	101		mg/kg	0.846	0.147	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.423	0.028	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Cadmium, Total	0.626	J	mg/kg	0.846	0.083	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Calcium, Total	48400		mg/kg	8.46	2.96	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Chromium, Total	13.9		mg/kg	0.846	0.081	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Cobalt, Total	6.42		mg/kg	1.69	0.140	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Copper, Total	422		mg/kg	0.846	0.218	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Iron, Total	13100		mg/kg	4.23	0.764	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Lead, Total	162		mg/kg	4.23	0.227	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Magnesium, Total	4310		mg/kg	8.46	1.30	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Manganese, Total	173		mg/kg	0.846	0.134	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Mercury, Total	0.235		mg/kg	0.068	0.014	1	01/03/19 07:30	01/04/19 18:57	EPA 7471B	1,7471B	EA
Nickel, Total	16.5		mg/kg	2.12	0.205	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Potassium, Total	2410		mg/kg	212	12.2	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Selenium, Total	0.347	J	mg/kg	1.69	0.218	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.846	0.240	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Sodium, Total	841		mg/kg	169	2.66	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.69	0.266	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Vanadium, Total	21.0		mg/kg	0.846	0.172	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Zinc, Total	130		mg/kg	4.23	0.248	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	0.86	0.86	1		01/07/19 17:17	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4590		mg/kg	9.18	2.48	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.59	0.349	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Arsenic, Total	1.06		mg/kg	0.918	0.191	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Barium, Total	19.4		mg/kg	0.918	0.160	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Beryllium, Total	0.128	J	mg/kg	0.459	0.030	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Cadmium, Total	0.184	J	mg/kg	0.918	0.090	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Calcium, Total	706		mg/kg	9.18	3.21	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Chromium, Total	7.45		mg/kg	0.918	0.088	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Cobalt, Total	3.49		mg/kg	1.84	0.152	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Copper, Total	7.19		mg/kg	0.918	0.237	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Iron, Total	9120		mg/kg	4.59	0.829	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Lead, Total	7.56		mg/kg	4.59	0.246	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Magnesium, Total	1870		mg/kg	9.18	1.41	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Manganese, Total	98.0		mg/kg	0.918	0.146	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.074	0.016	1	01/03/19 07:30	01/04/19 18:59	EPA 7471B	1,7471B	EA
Nickel, Total	7.35		mg/kg	2.30	0.222	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Potassium, Total	415		mg/kg	230	13.2	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Selenium, Total	0.340	J	mg/kg	1.84	0.237	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.918	0.260	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Sodium, Total	40.6	J	mg/kg	184	2.89	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.84	0.289	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Vanadium, Total	10.7		mg/kg	0.918	0.186	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Zinc, Total	17.0		mg/kg	4.59	0.269	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.4		mg/kg	0.94	0.94	1		01/07/19 17:46	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5060		mg/kg	8.48	2.29	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.24	0.322	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Arsenic, Total	1.78		mg/kg	0.848	0.176	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Barium, Total	46.6		mg/kg	0.848	0.148	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.424	0.028	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Cadmium, Total	0.237	J	mg/kg	0.848	0.083	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Calcium, Total	1760		mg/kg	8.48	2.97	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Chromium, Total	12.0		mg/kg	0.848	0.081	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Cobalt, Total	6.00		mg/kg	1.70	0.141	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Copper, Total	18.7		mg/kg	0.848	0.219	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Iron, Total	10500		mg/kg	4.24	0.766	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Lead, Total	4.34		mg/kg	4.24	0.227	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Magnesium, Total	2970		mg/kg	8.48	1.31	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Manganese, Total	147		mg/kg	0.848	0.135	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.069	0.015	1	01/03/19 07:30	01/04/19 19:01	EPA 7471B	1,7471B	EA
Nickel, Total	11.7		mg/kg	2.12	0.205	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Potassium, Total	1530		mg/kg	212	12.2	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.70	0.219	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.848	0.240	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Sodium, Total	229		mg/kg	170	2.67	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.70	0.267	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Vanadium, Total	18.1		mg/kg	0.848	0.172	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Zinc, Total	25.0		mg/kg	4.24	0.248	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.88	0.88	1		01/07/19 17:50	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-07
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4170		mg/kg	9.29	2.51	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.64	0.353	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Arsenic, Total	1.99		mg/kg	0.929	0.193	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Barium, Total	12.4		mg/kg	0.929	0.162	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Beryllium, Total	0.093	J	mg/kg	0.464	0.031	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Cadmium, Total	0.158	J	mg/kg	0.929	0.091	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Calcium, Total	724		mg/kg	9.29	3.25	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Chromium, Total	9.01		mg/kg	0.929	0.089	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Cobalt, Total	2.96		mg/kg	1.86	0.154	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Copper, Total	6.48		mg/kg	0.929	0.240	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Iron, Total	7500		mg/kg	4.64	0.839	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Lead, Total	12.0		mg/kg	4.64	0.249	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Magnesium, Total	1770		mg/kg	9.29	1.43	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Manganese, Total	78.9		mg/kg	0.929	0.148	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.074	0.016	1	01/03/19 07:30	01/04/19 19:03	EPA 7471B	1,7471B	EA
Nickel, Total	6.83		mg/kg	2.32	0.225	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Potassium, Total	532		mg/kg	232	13.4	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Selenium, Total	0.316	J	mg/kg	1.86	0.240	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.929	0.263	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Sodium, Total	85.4	J	mg/kg	186	2.93	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.86	0.293	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Vanadium, Total	11.8		mg/kg	0.929	0.188	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Zinc, Total	17.9		mg/kg	4.64	0.272	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	9.0		mg/kg	0.94	0.94	1		01/07/19 17:55	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1194294-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	01/03/19 07:30	01/04/19 18:09	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1194304-1										
Aluminum, Total	1.40	J	mg/kg	4.00	1.08	1	01/03/19 05:00	01/07/19 14:53	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Iron, Total	1.63	J	mg/kg	2.00	0.361	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Magnesium, Total	1.31	J	mg/kg	4.00	0.616	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Manganese, Total	0.152	J	mg/kg	0.400	0.064	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Selenium, Total	0.128	J	mg/kg	0.800	0.103	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Sodium, Total	ND		mg/kg	80.0	1.26	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1194294-2 SRM Lot Number: D102-540								
Mercury, Total	121		-		65-134	-		



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1194304-2 SRM Lot Number: D102-540					
Aluminum, Total	65	-	49-150	-	
Antimony, Total	111	-	1-199	-	
Arsenic, Total	101	-	83-117	-	
Barium, Total	96	-	83-118	-	
Beryllium, Total	93	-	83-116	-	
Cadmium, Total	104	-	83-118	-	
Calcium, Total	86	-	82-118	-	
Chromium, Total	91	-	83-117	-	
Cobalt, Total	96	-	84-116	-	
Copper, Total	91	-	84-116	-	
Iron, Total	80	-	61-139	-	
Lead, Total	97	-	82-118	-	
Magnesium, Total	80	-	76-124	-	
Manganese, Total	92	-	82-118	-	
Nickel, Total	97	-	83-117	-	
Potassium, Total	76	-	70-130	-	
Selenium, Total	98	-	79-121	-	
Silver, Total	97	-	80-120	-	
Sodium, Total	99	-	74-126	-	
Thallium, Total	99	-	81-119	-	
Vanadium, Total	91	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1194304-2 SRM Lot Number: D102-540					
Zinc, Total	93	-	81-118	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194294-3 QC Sample: L1852427-05 Client ID: MS Sample												
Mercury, Total	0.132	0.144	0.351	152	Q	-	-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-3 QC Sample: L1852427-05 Client ID: MS Sample									
Aluminum, Total	19600	180	21700	1160	Q	-	75-125	-	20
Antimony, Total	ND	45.1	23.4	52	Q	-	75-125	-	20
Arsenic, Total	5.34	10.8	16.9	107		-	75-125	-	20
Barium, Total	186	180	410	124		-	75-125	-	20
Beryllium, Total	ND	4.51	3.10	69	Q	-	75-125	-	20
Cadmium, Total	0.746J	4.6	4.74	103		-	75-125	-	20
Calcium, Total	45000	902	48300	366	Q	-	75-125	-	20
Chromium, Total	31.9	18	53.5	120		-	75-125	-	20
Cobalt, Total	7.64	45.1	43.3	79		-	75-125	-	20
Copper, Total	23.1	22.5	36.0	57	Q	-	75-125	-	20
Iron, Total	13900	90.2	14500	665	Q	-	75-125	-	20
Lead, Total	67.2	46	130	136	Q	-	75-125	-	20
Magnesium, Total	39200	902	39200	0	Q	-	75-125	-	20
Manganese, Total	306	45.1	379	162	Q	-	75-125	-	20
Nickel, Total	12.7	45.1	49.7	82		-	75-125	-	20
Potassium, Total	1240	902	2080	93		-	75-125	-	20
Selenium, Total	0.404J	10.8	10.4	96		-	75-125	-	20
Silver, Total	ND	27	26.6	98		-	75-125	-	20
Sodium, Total	906	902	1840	104		-	75-125	-	20
Thallium, Total	ND	10.8	6.65	61	Q	-	75-125	-	20
Vanadium, Total	41.3	45.1	73.8	72	Q	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits	
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-3 QC Sample: L1852427-05 Client ID: MS Sample										
Zinc, Total	127	45.1	209	182	Q	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194294-4 QC Sample: L1852427-05 Client ID: DUP Sample						
Mercury, Total	0.132	0.198	mg/kg	40	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-4 QC Sample: L1852427-05 Client ID: DUP Sample					
Antimony, Total	ND	ND	mg/kg	NC	20
Arsenic, Total	5.34	5.28	mg/kg	1	20
Barium, Total	186	188	mg/kg	1	20
Beryllium, Total	ND	ND	mg/kg	NC	20
Cadmium, Total	0.746J	0.701J	mg/kg	NC	20
Calcium, Total	45000	45700	mg/kg	2	20
Chromium, Total	31.9	28.9	mg/kg	10	20
Cobalt, Total	7.64	7.26	mg/kg	5	20
Copper, Total	23.1	15.5	mg/kg	39	Q 20
Iron, Total	13900	12900	mg/kg	7	20
Lead, Total	67.2	65.8	mg/kg	2	20
Magnesium, Total	39200	35600	mg/kg	10	20
Manganese, Total	306	341	mg/kg	11	20
Nickel, Total	12.7	11.0	mg/kg	14	20
Potassium, Total	1240	1090	mg/kg	13	20
Selenium, Total	0.404J	1.20J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	906	936	mg/kg	3	20
Thallium, Total	ND	ND	mg/kg	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-4 QC Sample: L1852427-05 Client ID: DUP Sample					
Vanadium, Total	41.3	31.8	mg/kg	26	Q 20
Zinc, Total	127	131	mg/kg	3	20
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-4 QC Sample: L1852427-05 Client ID: DUP Sample					
Aluminum, Total	19600	20600	mg/kg	5	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01

Date Collected: 01/02/19 13:40

Client ID: RB09_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.7		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/03/19 12:15	01/03/19 15:14	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.836	0.167	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02

Date Collected: 01/02/19 13:45

Client ID: RB09_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.1		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	01/03/19 12:15	01/03/19 15:20	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.940	0.188	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.9		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	01/03/19 12:15	01/03/19 15:21	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.965	0.193	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-04

Date Collected: 01/02/19 10:30

Client ID: RB11_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.6		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/03/19 12:15	01/03/19 15:22	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.864	0.173	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-05

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.9		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	01/03/19 12:15	01/03/19 15:23	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.942	0.188	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.7		%	0.100	NA	1	-	01/04/19 13:19	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/03/19 12:15	01/03/19 15:24	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.882	0.176	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-07

Date Collected: 01/02/19 00:00

Client ID: SODUP03_010219

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.7		%	0.100	NA	1	-	01/04/19 13:19	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/03/19 12:15	01/03/19 15:25	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.944	0.189	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-07 Batch: WG1194320-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH
General Chemistry - Westborough Lab for sample(s): 01-07 Batch: WG1194383-1										
Cyanide, Total	ND		mg/kg	0.93	0.20	1	01/03/19 12:15	01/03/19 14:56	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-07 Batch: WG1194320-2								
Chromium, Hexavalent	97		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-07 Batch: WG1194383-2 WG1194383-3								
Cyanide, Total	68	Q	72	Q	80-120	11		35

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1194320-4 QC Sample: L1900156-04 Client ID: RB11_0-2												
Chromium, Hexavalent	ND	1460	1300	89		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1194383-4 WG1194383-5 QC Sample: L1900156-01 Client ID: RB09_0-2												
Cyanide, Total	ND	10	9.6	95		8.4	81		75-125	13		35

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1194320-6 QC Sample: L1900156-04 Client ID: RB11_0-2						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1194804-1 QC Sample: L1852427-05 Client ID: DUP Sample						
Solids, Total	87.3	87.0	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 06-07 QC Batch ID: WG1194806-1 QC Sample: L1900160-01 Client ID: DUP Sample						
Solids, Total	85.7	87.1	%	2		20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01091916:22
Lab Number: L1900156
Report Date: 01/09/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900156-01A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-01B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-01C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-01D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-01E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-01F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-01G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-02A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-02B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-02C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-02D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-02E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-02F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-02G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-03A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900156-03B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-03C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-03D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-03E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-03F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-03G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-04A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-04B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-04C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-04D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-04E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-04F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-04G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-05A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-05B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-05C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-05D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900156-05E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-05F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-05G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-06A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-06B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-06C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-06D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-06E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-06F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-06G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-07A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-07B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-07C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-07D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-07E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-07F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-07G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-08A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Serial_No:01091916:22

Lab Number: L1900156

Report Date: 01/09/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900156-08B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

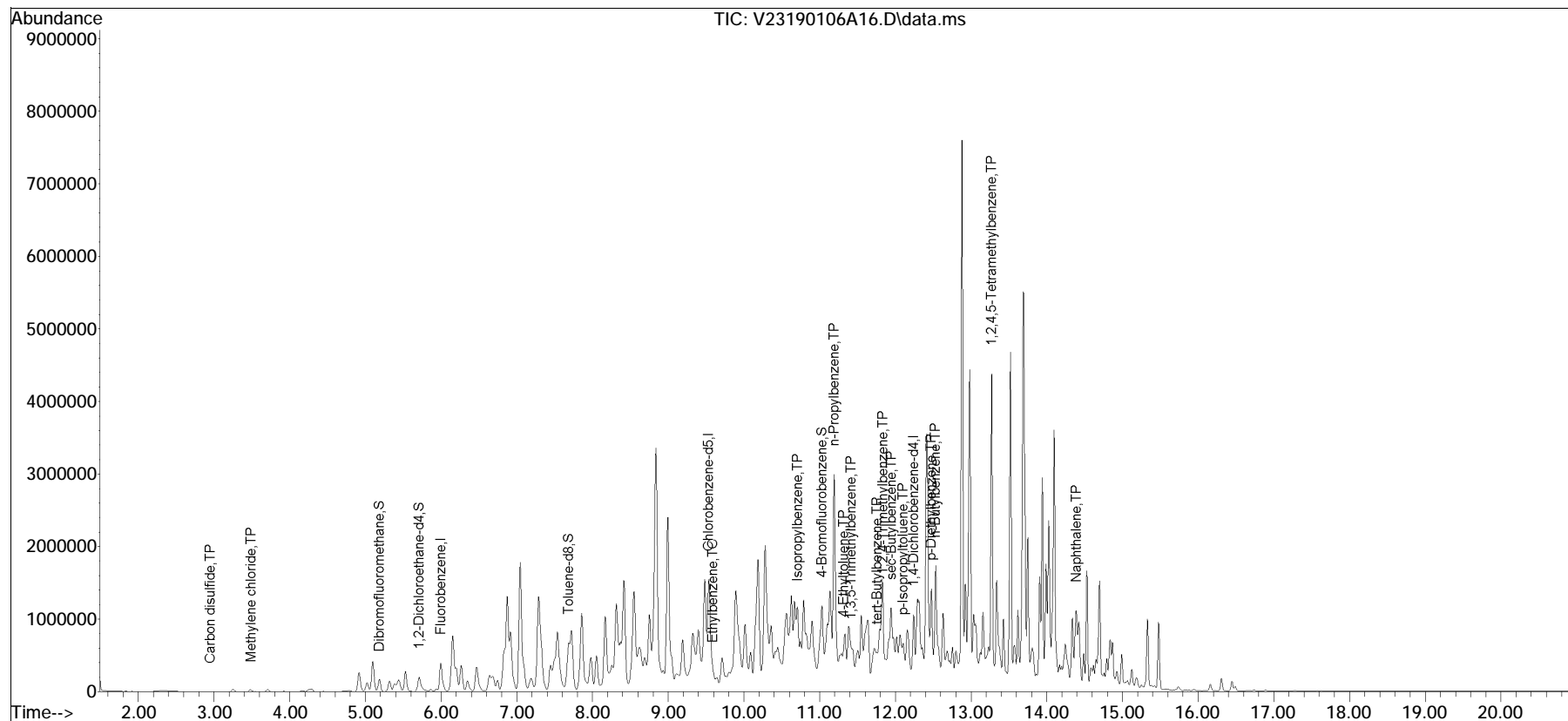
 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab 1/3/19	ALPHA Job # L1900156																																																																																																																																																		
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #																																																																																																																																																	
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																																																																																	
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.																																																																																																																																																							
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">Part 375/TCL VOCs</th> <th rowspan="2">Part 375/TCL SVOCs</th> <th rowspan="2">Part 375/TCL PCBs</th> <th rowspan="2">Pesticides</th> <th rowspan="2">Herbicides</th> <th rowspan="2">TAL Metals</th> <th rowspan="2">Hex Chromium</th> <th rowspan="2">Total cyanide</th> <th rowspan="2">Sample Specific Comments</th> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">Total Bottles</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>02156-01</td> <td>RB09-0-2</td> <td>11/2/19</td> <td>1340</td> <td>SD1</td> <td>JD</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>02</td> <td>RB09-19-21</td> <td></td> <td>1345</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>03</td> <td>RB09-28-30</td> <td></td> <td>1340</td> <td></td> <td>JA</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>04</td> <td>RB11-0-2</td> <td></td> <td>1030</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>05</td> <td>RB11-19-21</td> <td></td> <td>1035</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>06</td> <td>RB11-28-30</td> <td></td> <td>1040</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>07</td> <td>SD06P03-010219</td> <td></td> <td>-</td> <td>AQ</td> <td>JD</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>08</td> <td>SOTB04-010219</td> <td></td> <td>-</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total cyanide	Sample Specific Comments	Total Bottles	Date	Time	02156-01	RB09-0-2	11/2/19	1340	SD1	JD	X	X	X	X	X	X	X	X			02	RB09-19-21		1345		JD											03	RB09-28-30		1340		JA											04	RB11-0-2		1030		JD											05	RB11-19-21		1035		JD											06	RB11-28-30		1040		JD											07	SD06P03-010219		-	AQ	JD	X										08	SOTB04-010219		-		JD										
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative																																																																																																																																																	
Relinquished By: [Signature] D. Santos		Date/Time 1/2/19-3:15pm 1/2/19 1730 1/2/19 2250		Received By: [Signature] D. Santos		Date/Time 1/2/19 1515 1/2/19 1900 1/2/19 2250																																																																																																																																																	
Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																																																																																																							

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA123\2019\190106A\
 Data File : V23190106A16.D
 Acq On : 06 Jan 2019 15:45
 Operator : VOA123:JC
 Sample : 11900156-05D,31H,5.72,5,0.050,,a
 Misc : WG1195272,ICAL15371
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 06 18:36:18 2019
 Quant Method : I:\VOLATILES\VOA123\2019\190106A\V123_190103D_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jan 04 09:22:26 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90106A\V23190106A02.D•

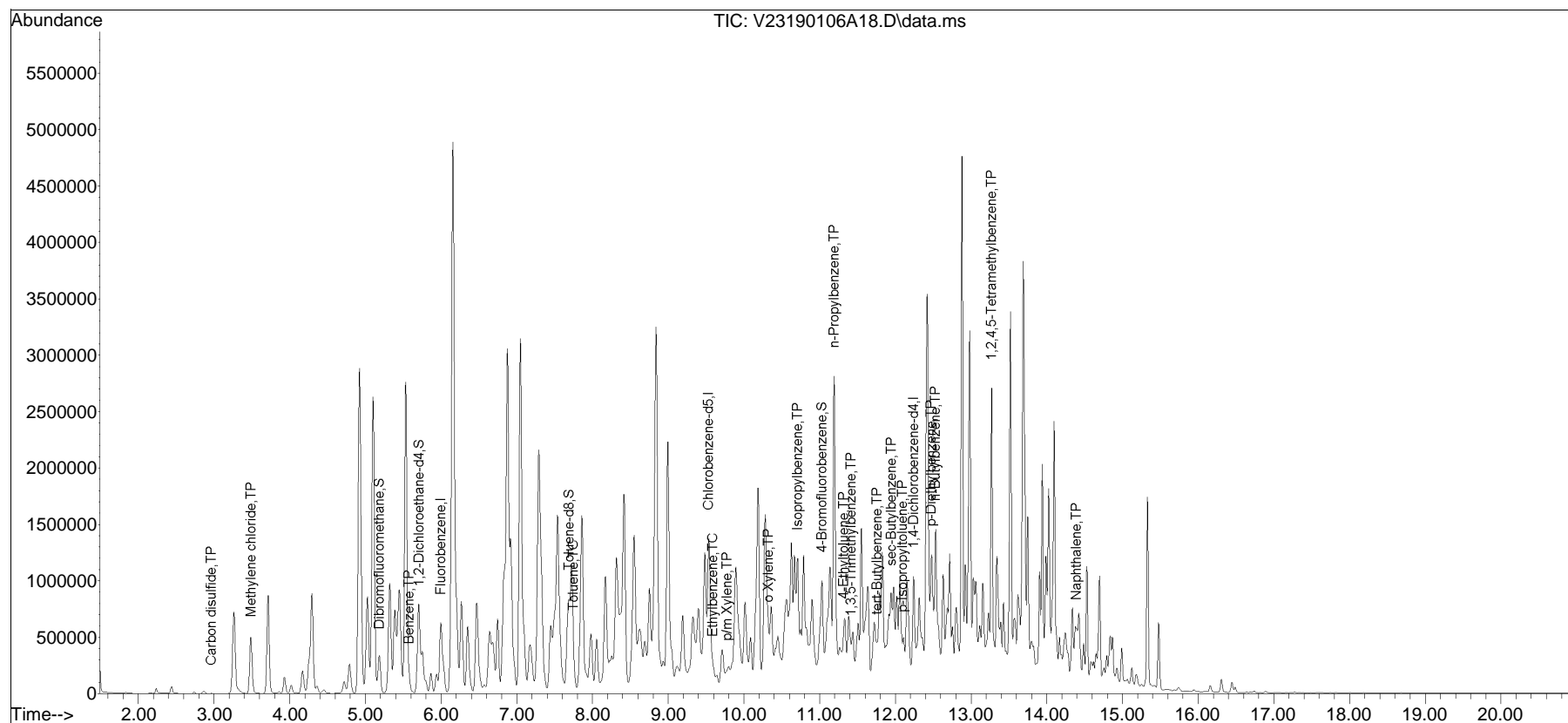


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA123\2019\190106A\
 Data File : V23190106A18.D
 Acq On : 06 Jan 2019 16:36
 Operator : VOA123:JC
 Sample : 11900156-07D,31H,6.11,5,0.010,,a
 Misc : WG1195272,ICAL15371
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 06 18:42:06 2019
 Quant Method : I:\VOLATILES\VOA123\2019\190106A\V123_190103D_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jan 04 09:22:26 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90106A\V23190106A02.D•





ANALYTICAL REPORT

Lab Number:	L1900324
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/10/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900324-01	RB21_0-2	SOIL	BRONX, NY	01/03/19 11:30	01/03/19
L1900324-02	RB21_2-4	SOIL	BRONX, NY	01/03/19 11:35	01/03/19
L1900324-03	RB21_18-20	SOIL	BRONX, NY	01/03/19 11:40	01/03/19
L1900324-04	RB22_0-2	SOIL	BRONX, NY	01/03/19 13:00	01/03/19
L1900324-05	RB22_3-5	SOIL	BRONX, NY	01/03/19 13:05	01/03/19
L1900324-06	RB19_0-2	SOIL	BRONX, NY	01/03/19 14:00	01/03/19
L1900324-07	RB19_20-22	SOIL	BRONX, NY	01/03/19 14:05	01/03/19
L1900324-08	RB19_24-25	SOIL	BRONX, NY	01/03/19 14:10	01/03/19
L1900324-09	SOTB05_010319	WATER	BRONX, NY	01/03/19 00:00	01/03/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Semivolatile Organics

L1900324-07: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

The WG1194798-4/-5 MS/MSD recoveries, performed on L1900324-02, is below the acceptance criteria for benzoic acid (0%/0%) due to the concentration of this compound falling below the reported detection limit.

PCBs

L1900324-07: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

Total Metals

L1900324-01 through -08: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1194873-3 MS recoveries, performed on L1900324-02, are outside the acceptance criteria for antimony (MS at 74%), arsenic (MS at 41%), chromium (MSD at 74%), potassium (MS at 138%), and thallium (70%/69%). A post digestion spike was performed and was within acceptance criteria.

The WG1194873-3/-4 MS/MSD recoveries for aluminum (0%/0%), calcium (2580%/2410%), copper (MS at 63%), lead (MSD at 22%), magnesium (304%/64%), manganese (MS at 200%), and zinc (MSD at 60%), performed on L1900324-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1194873-3/-4 MS/MSD recoveries for iron (16300%/0%), performed on L1900324-02, does not apply

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Case Narrative (continued)

because the sample concentration is greater than four times the spike amount added.

The WG1194873-4 MS/MSD RPDs for arsenic (34%), iron (55%), and magnesium (31%), performed on L1900324-02, are above the acceptance criteria.

The WG1195001-4 MSD recovery, performed on L1900324-02, is outside the acceptance criteria for mercury (127%). A post digestion spike was performed and was within acceptance criteria.

Cyanide, Total

The WG1194787-2/-3 LCS/LCSD recoveries (48%/46%), associated with L1900324-01 through -08, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/10/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 15:47
 Analyst: AD
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	0.21	J	ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.76	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.4	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.4	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-01

Date Collected: 01/03/19 11:30

Client ID: RB21_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	11		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.71	1
Acrylonitrile	ND		ug/kg	4.4	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
Client ID: RB21_0-2
Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 16:13
 Analyst: AD
 Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.79	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.57	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	ND		ug/kg	1.1	0.62	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.3	0.66	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-02

Date Collected: 01/03/19 11:35

Client ID: RB21_2-4

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.3	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.57	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.5	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.5	0.74	1
Acrylonitrile	ND		ug/kg	4.5	1.3	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
Client ID: RB21_2-4
Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	110	40.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.7	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 16:39
 Analyst: AD
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.9	1.8	1
1,1-Dichloroethane	ND		ug/kg	0.77	0.11	1
Chloroform	ND		ug/kg	1.2	0.11	1
Carbon tetrachloride	ND		ug/kg	0.77	0.18	1
1,2-Dichloropropane	ND		ug/kg	0.77	0.10	1
Dibromochloromethane	ND		ug/kg	0.77	0.11	1
1,1,2-Trichloroethane	ND		ug/kg	0.77	0.21	1
Tetrachloroethene	ND		ug/kg	0.39	0.15	1
Chlorobenzene	ND		ug/kg	0.39	0.10	1
Trichlorofluoromethane	ND		ug/kg	3.1	0.54	1
1,2-Dichloroethane	ND		ug/kg	0.77	0.20	1
1,1,1-Trichloroethane	ND		ug/kg	0.39	0.13	1
Bromodichloromethane	ND		ug/kg	0.39	0.08	1
trans-1,3-Dichloropropene	ND		ug/kg	0.77	0.21	1
cis-1,3-Dichloropropene	ND		ug/kg	0.39	0.12	1
1,3-Dichloropropene, Total	ND		ug/kg	0.39	0.12	1
1,1-Dichloropropene	ND		ug/kg	0.39	0.12	1
Bromoform	ND		ug/kg	3.1	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.39	0.13	1
Benzene	ND		ug/kg	0.39	0.13	1
Toluene	ND		ug/kg	0.77	0.42	1
Ethylbenzene	ND		ug/kg	0.77	0.11	1
Chloromethane	ND		ug/kg	3.1	0.72	1
Bromomethane	ND		ug/kg	1.5	0.45	1
Vinyl chloride	ND		ug/kg	0.77	0.26	1
Chloroethane	ND		ug/kg	1.5	0.35	1
1,1-Dichloroethene	ND		ug/kg	0.77	0.18	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.10	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.39	0.10	1
1,2-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,3-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,4-Dichlorobenzene	ND		ug/kg	1.5	0.13	1
Methyl tert butyl ether	ND		ug/kg	1.5	0.16	1
p/m-Xylene	ND		ug/kg	1.5	0.43	1
o-Xylene	ND		ug/kg	0.77	0.22	1
Xylenes, Total	ND		ug/kg	0.77	0.22	1
cis-1,2-Dichloroethene	ND		ug/kg	0.77	0.14	1
1,2-Dichloroethene, Total	ND		ug/kg	0.77	0.10	1
Dibromomethane	ND		ug/kg	1.5	0.18	1
Styrene	ND		ug/kg	0.77	0.15	1
Dichlorodifluoromethane	ND		ug/kg	7.7	0.71	1
Acetone	7.0	J	ug/kg	7.7	3.7	1
Carbon disulfide	ND		ug/kg	7.7	3.5	1
2-Butanone	ND		ug/kg	7.7	1.7	1
Vinyl acetate	ND		ug/kg	7.7	1.7	1
4-Methyl-2-pentanone	ND		ug/kg	7.7	0.99	1
1,2,3-Trichloropropane	ND		ug/kg	1.5	0.10	1
2-Hexanone	ND		ug/kg	7.7	0.91	1
Bromochloromethane	ND		ug/kg	1.5	0.16	1
2,2-Dichloropropane	ND		ug/kg	1.5	0.16	1
1,2-Dibromoethane	ND		ug/kg	0.77	0.22	1
1,3-Dichloropropane	ND		ug/kg	1.5	0.13	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.39	0.10	1
Bromobenzene	ND		ug/kg	1.5	0.11	1
n-Butylbenzene	ND		ug/kg	0.77	0.13	1
sec-Butylbenzene	ND		ug/kg	0.77	0.11	1
tert-Butylbenzene	ND		ug/kg	1.5	0.09	1
o-Chlorotoluene	ND		ug/kg	1.5	0.15	1
p-Chlorotoluene	ND		ug/kg	1.5	0.08	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.3	0.77	1
Hexachlorobutadiene	ND		ug/kg	3.1	0.13	1
Isopropylbenzene	ND		ug/kg	0.77	0.08	1
p-Isopropyltoluene	ND		ug/kg	0.77	0.08	1
Naphthalene	ND		ug/kg	3.1	0.50	1
Acrylonitrile	ND		ug/kg	3.1	0.89	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
Client ID: RB21_18-20
Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.77	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.5	0.25	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.5	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.5	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.5	0.26	1
1,4-Dioxane	ND		ug/kg	77	27.	1
p-Diethylbenzene	ND		ug/kg	1.5	0.14	1
p-Ethyltoluene	ND		ug/kg	1.5	0.30	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.5	0.15	1
Ethyl ether	ND		ug/kg	1.5	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	3.9	1.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 17:04
 Analyst: AD
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.58	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.1	0.62	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.1	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-04

Date Collected: 01/03/19 13:00

Client ID: RB22_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.22	1
p/m-Xylene	ND		ug/kg	2.1	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.1	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.98	1
Acetone	14		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.1	0.13	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.19	1
p-Ethyltoluene	ND		ug/kg	2.1	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 17:30
 Analyst: AD
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.3	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	0.20	J	ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.53	0.21	1
Chlorobenzene	ND		ug/kg	0.53	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.73	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.53	0.18	1
Bromodichloromethane	ND		ug/kg	0.53	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.53	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.53	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.53	0.17	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.53	0.18	1
Benzene	ND		ug/kg	0.53	0.18	1
Toluene	ND		ug/kg	1.0	0.57	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.98	1
Bromomethane	0.82	J	ug/kg	2.1	0.61	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.53	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.59	1
o-Xylene	ND		ug/kg	1.0	0.31	1
Xylenes, Total	ND		ug/kg	1.0	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.0	0.21	1
Dichlorodifluoromethane	ND		ug/kg	10	0.96	1
Acetone	5.3	J	ug/kg	10	5.1	1
Carbon disulfide	ND		ug/kg	10	4.8	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.53	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.18	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.2	0.18	1
Isopropylbenzene	ND		ug/kg	1.0	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.12	1
Naphthalene	ND		ug/kg	4.2	0.69	1
Acrylonitrile	ND		ug/kg	4.2	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
Client ID: RB22_3-5
Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	100	37.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.19	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.36	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.3	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 17:56
 Analyst: AD
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	0.95		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.94	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	100	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.39	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/08/19 18:42
 Analyst: AD
 Percent Solids: 57%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	710	330	1
1,1-Dichloroethane	ND		ug/kg	140	21.	1
Chloroform	ND		ug/kg	210	20.	1
Carbon tetrachloride	ND		ug/kg	140	33.	1
1,2-Dichloropropane	ND		ug/kg	140	18.	1
Dibromochloromethane	ND		ug/kg	140	20.	1
1,1,2-Trichloroethane	ND		ug/kg	140	38.	1
Tetrachloroethene	ND		ug/kg	71	28.	1
Chlorobenzene	ND		ug/kg	71	18.	1
Trichlorofluoromethane	ND		ug/kg	570	99.	1
1,2-Dichloroethane	ND		ug/kg	140	37.	1
1,1,1-Trichloroethane	ND		ug/kg	71	24.	1
Bromodichloromethane	ND		ug/kg	71	16.	1
trans-1,3-Dichloropropene	ND		ug/kg	140	39.	1
cis-1,3-Dichloropropene	ND		ug/kg	71	22.	1
1,3-Dichloropropene, Total	ND		ug/kg	71	22.	1
1,1-Dichloropropene	ND		ug/kg	71	23.	1
Bromoform	ND		ug/kg	570	35.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	71	24.	1
Benzene	ND		ug/kg	71	24.	1
Toluene	ND		ug/kg	140	78.	1
Ethylbenzene	24	J	ug/kg	140	20.	1
Chloromethane	ND		ug/kg	570	130	1
Bromomethane	ND		ug/kg	280	83.	1
Vinyl chloride	ND		ug/kg	140	48.	1
Chloroethane	ND		ug/kg	280	64.	1
1,1-Dichloroethene	ND		ug/kg	140	34.	1
trans-1,2-Dichloroethene	ND		ug/kg	210	20.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-07

Date Collected: 01/03/19 14:05

Client ID: RB19_20-22

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	71	20.	1
1,2-Dichlorobenzene	ND		ug/kg	280	20.	1
1,3-Dichlorobenzene	ND		ug/kg	280	21.	1
1,4-Dichlorobenzene	ND		ug/kg	280	24.	1
Methyl tert butyl ether	ND		ug/kg	280	29.	1
p/m-Xylene	240	J	ug/kg	280	80.	1
o-Xylene	66	J	ug/kg	140	42.	1
Xylenes, Total	310	J	ug/kg	140	42.	1
cis-1,2-Dichloroethene	ND		ug/kg	140	25.	1
1,2-Dichloroethene, Total	ND		ug/kg	140	20.	1
Dibromomethane	ND		ug/kg	280	34.	1
Styrene	ND		ug/kg	140	28.	1
Dichlorodifluoromethane	ND		ug/kg	1400	130	1
Acetone	ND		ug/kg	1400	690	1
Carbon disulfide	ND		ug/kg	1400	650	1
2-Butanone	ND		ug/kg	1400	320	1
Vinyl acetate	ND		ug/kg	1400	310	1
4-Methyl-2-pentanone	ND		ug/kg	1400	180	1
1,2,3-Trichloropropane	ND		ug/kg	280	18.	1
2-Hexanone	ND		ug/kg	1400	170	1
Bromochloromethane	ND		ug/kg	280	29.	1
2,2-Dichloropropane	ND		ug/kg	280	29.	1
1,2-Dibromoethane	ND		ug/kg	140	40.	1
1,3-Dichloropropane	ND		ug/kg	280	24.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	71	19.	1
Bromobenzene	ND		ug/kg	280	21.	1
n-Butylbenzene	33	J	ug/kg	140	24.	1
sec-Butylbenzene	61	J	ug/kg	140	21.	1
tert-Butylbenzene	ND		ug/kg	280	17.	1
o-Chlorotoluene	ND		ug/kg	280	27.	1
p-Chlorotoluene	ND		ug/kg	280	15.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	430	140	1
Hexachlorobutadiene	ND		ug/kg	570	24.	1
Isopropylbenzene	43	J	ug/kg	140	16.	1
p-Isopropyltoluene	16	J	ug/kg	140	16.	1
Naphthalene	120	J	ug/kg	570	93.	1
Acrylonitrile	ND		ug/kg	570	160	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	38	J	ug/kg	140	24.	1
1,2,3-Trichlorobenzene	ND		ug/kg	280	46.	1
1,2,4-Trichlorobenzene	ND		ug/kg	280	39.	1
1,3,5-Trimethylbenzene	58	J	ug/kg	280	28.	1
1,2,4-Trimethylbenzene	340		ug/kg	280	48.	1
1,4-Dioxane	ND		ug/kg	14000	5000	1
p-Diethylbenzene	120	J	ug/kg	280	25.	1
p-Ethyltoluene	230	J	ug/kg	280	55.	1
1,2,4,5-Tetramethylbenzene	950		ug/kg	280	27.	1
Ethyl ether	ND		ug/kg	280	49.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	710	200	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 18:22
 Analyst: AD
 Percent Solids: 66%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.8	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.36	1
Tetrachloroethene	ND		ug/kg	0.68	0.27	1
Chlorobenzene	ND		ug/kg	0.68	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.94	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.68	0.23	1
Bromodichloromethane	ND		ug/kg	0.68	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.68	0.21	1
1,3-Dichloropropene, Total	ND		ug/kg	0.68	0.21	1
1,1-Dichloropropene	ND		ug/kg	0.68	0.22	1
Bromoform	ND		ug/kg	5.4	0.33	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.68	0.22	1
Benzene	ND		ug/kg	0.68	0.22	1
Toluene	ND		ug/kg	1.4	0.74	1
Ethylbenzene	ND		ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.4	1.3	1
Bromomethane	ND		ug/kg	2.7	0.79	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.7	0.61	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.19	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.68	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.76	1
o-Xylene	ND		ug/kg	1.4	0.40	1
Xylenes, Total	ND		ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.7	0.32	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	44		ug/kg	14	6.5	1
Carbon disulfide	ND		ug/kg	14	6.2	1
2-Butanone	7.4	J	ug/kg	14	3.0	1
Vinyl acetate	ND		ug/kg	14	2.9	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.7	0.17	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
2,2-Dichloropropane	ND		ug/kg	2.7	0.27	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
1,3-Dichloropropane	ND		ug/kg	2.7	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.68	0.18	1
Bromobenzene	ND		ug/kg	2.7	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.7	0.16	1
o-Chlorotoluene	ND		ug/kg	2.7	0.26	1
p-Chlorotoluene	ND		ug/kg	2.7	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.4	0.23	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.4	0.88	1
Acrylonitrile	ND		ug/kg	5.4	1.6	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
Client ID: RB19_24-25
Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.37	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.45	1
1,4-Dioxane	ND		ug/kg	140	48.	1
p-Diethylbenzene	ND		ug/kg	2.7	0.24	1
p-Ethyltoluene	ND		ug/kg	2.7	0.52	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.7	0.26	1
Ethyl ether	ND		ug/kg	2.7	0.46	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.8	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	105		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-09
 Client ID: SOTB05_010319
 Sample Location: BRONX, NY

Date Collected: 01/03/19 00:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 15:35
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-09

Date Collected: 01/03/19 00:00

Client ID: SOTB05_010319

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-09
 Client ID: SOTB05_010319
 Sample Location: BRONX, NY

Date Collected: 01/03/19 00:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/19 12:10
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1195197-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/19 12:10
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1195197-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/06/19 12:10
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1195197-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/07/19 14:04
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-06,08 Batch: WG1195498-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.96	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/07/19 14:04
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-06,08 Batch: WG1195498-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/07/19 14:04
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-06,08 Batch: WG1195498-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	100		70-130



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/08/19 10:15
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1195747-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	33	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/08/19 10:15
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1195747-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/08/19 10:15
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1195747-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1195197-3 WG1195197-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	110		120		70-130	9		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	120		120		70-130	0		20
Dibromochloromethane	110		110		63-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	120		120		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	110		110		70-130	0		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	100		99		54-136	1		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	94		95		64-130	1		20
Bromomethane	48		54		39-139	12		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1195197-3 WG1195197-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	100		110		55-138	10		20
1,1-Dichloroethene	110		100		61-145	10		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	110		110		70-130	0		20
1,2,3-Trichloropropane	110		110		64-130	0		20
Acrylonitrile	100		100		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	92		92		36-147	0		20
Acetone	140		120		58-148	15		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	89		82		63-138	8		20
Vinyl acetate	120		120		70-130	0		20
4-Methyl-2-pentanone	97		98		59-130	1		20
2-Hexanone	110		100		57-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1195197-3 WG1195197-4								
Bromochloromethane	120		120		70-130	0		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	110		110		70-130	0		20
1,3-Dichloropropane	110		100		70-130	10		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		99		70-130	1		20
n-Butylbenzene	110		100		53-136	10		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	97		96		70-130	1		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	96		94		41-144	2		20
Hexachlorobutadiene	100		100		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	97		97		70-130	0		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	97		98		70-130	1		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
1,4-Dioxane	144		128		56-162	12		20
p-Diethylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1195197-3 WG1195197-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	110		110		59-134	0		20
trans-1,4-Dichloro-2-butene	99		94		70-130	5		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	108		106		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	105		104		70-130
Dibromofluoromethane	104		103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1195498-3 WG1195498-4								
Methylene chloride	91		90		70-130	1		30
1,1-Dichloroethane	106		104		70-130	2		30
Chloroform	91		88		70-130	3		30
Carbon tetrachloride	100		101		70-130	1		30
1,2-Dichloropropane	102		104		70-130	2		30
Dibromochloromethane	99		99		70-130	0		30
1,1,2-Trichloroethane	88		86		70-130	2		30
Tetrachloroethene	94		94		70-130	0		30
Chlorobenzene	90		89		70-130	1		30
Trichlorofluoromethane	93		102		70-139	9		30
1,2-Dichloroethane	100		100		70-130	0		30
1,1,1-Trichloroethane	100		100		70-130	0		30
Bromodichloromethane	94		92		70-130	2		30
trans-1,3-Dichloropropene	91		90		70-130	1		30
cis-1,3-Dichloropropene	90		90		70-130	0		30
1,1-Dichloropropene	90		91		70-130	1		30
Bromoform	90		91		70-130	1		30
1,1,2,2-Tetrachloroethane	83		82		70-130	1		30
Benzene	88		87		70-130	1		30
Toluene	89		88		70-130	1		30
Ethylbenzene	88		87		70-130	1		30
Chloromethane	149	Q	149	Q	52-130	0		30
Bromomethane	162	Q	164	Q	57-147	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1195498-3 WG1195498-4								
Vinyl chloride	138	Q	138	Q	67-130	0		30
Chloroethane	119		130		50-151	9		30
1,1-Dichloroethene	110		98		65-135	12		30
trans-1,2-Dichloroethene	95		98		70-130	3		30
Trichloroethene	94		94		70-130	0		30
1,2-Dichlorobenzene	86		87		70-130	1		30
1,3-Dichlorobenzene	86		85		70-130	1		30
1,4-Dichlorobenzene	85		85		70-130	0		30
Methyl tert butyl ether	89		90		66-130	1		30
p/m-Xylene	87		87		70-130	0		30
o-Xylene	88		87		70-130	1		30
cis-1,2-Dichloroethene	93		95		70-130	2		30
Dibromomethane	90		90		70-130	0		30
Styrene	86		88		70-130	2		30
Dichlorodifluoromethane	145		143		30-146	1		30
Acetone	98		95		54-140	3		30
Carbon disulfide	104		84		59-130	21		30
2-Butanone	91		92		70-130	1		30
Vinyl acetate	116		114		70-130	2		30
4-Methyl-2-pentanone	99		100		70-130	1		30
1,2,3-Trichloropropane	80		78		68-130	3		30
2-Hexanone	89		84		70-130	6		30
Bromochloromethane	103		103		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1195498-3 WG1195498-4								
2,2-Dichloropropane	92		92		70-130	0		30
1,2-Dibromoethane	90		91		70-130	1		30
1,3-Dichloropropane	88		88		69-130	0		30
1,1,1,2-Tetrachloroethane	100		100		70-130	0		30
Bromobenzene	86		85		70-130	1		30
n-Butylbenzene	83		84		70-130	1		30
sec-Butylbenzene	81		80		70-130	1		30
tert-Butylbenzene	86		86		70-130	0		30
o-Chlorotoluene	81		79		70-130	3		30
p-Chlorotoluene	82		81		70-130	1		30
1,2-Dibromo-3-chloropropane	84		85		68-130	1		30
Hexachlorobutadiene	82		84		67-130	2		30
Isopropylbenzene	80		79		70-130	1		30
p-Isopropyltoluene	86		87		70-130	1		30
Naphthalene	82		82		70-130	0		30
Acrylonitrile	114		115		70-130	1		30
n-Propylbenzene	81		80		70-130	1		30
1,2,3-Trichlorobenzene	81		81		70-130	0		30
1,2,4-Trichlorobenzene	82		81		70-130	1		30
1,3,5-Trimethylbenzene	80		79		70-130	1		30
1,2,4-Trimethylbenzene	82		81		70-130	1		30
1,4-Dioxane	78		79		65-136	1		30
p-Diethylbenzene	85		85		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1195498-3 WG1195498-4								
p-Ethyltoluene	79		79		70-130	0		30
1,2,4,5-Tetramethylbenzene	80		80		70-130	0		30
Ethyl ether	94		83		67-130	12		30
trans-1,4-Dichloro-2-butene	101		95		70-130	6		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	103		104		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	98		100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1195747-3 WG1195747-4								
Methylene chloride	94		94		70-130	0		30
1,1-Dichloroethane	100		100		70-130	0		30
Chloroform	98		101		70-130	3		30
Carbon tetrachloride	103		102		70-130	1		30
1,2-Dichloropropane	98		99		70-130	1		30
Dibromochloromethane	100		102		70-130	2		30
1,1,2-Trichloroethane	99		100		70-130	1		30
Tetrachloroethene	106		104		70-130	2		30
Chlorobenzene	102		103		70-130	1		30
Trichlorofluoromethane	99		99		70-139	0		30
1,2-Dichloroethane	96		98		70-130	2		30
1,1,1-Trichloroethane	102		103		70-130	1		30
Bromodichloromethane	99		101		70-130	2		30
trans-1,3-Dichloropropene	102		104		70-130	2		30
cis-1,3-Dichloropropene	100		101		70-130	1		30
1,1-Dichloropropene	104		104		70-130	0		30
Bromoform	100		103		70-130	3		30
1,1,2,2-Tetrachloroethane	96		100		70-130	4		30
Benzene	99		101		70-130	2		30
Toluene	104		104		70-130	0		30
Ethylbenzene	106		106		70-130	0		30
Chloromethane	100		98		52-130	2		30
Bromomethane	92		91		57-147	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1195747-3 WG1195747-4								
Vinyl chloride	99		97		67-130	2		30
Chloroethane	97		96		50-151	1		30
1,1-Dichloroethene	102		102		65-135	0		30
trans-1,2-Dichloroethene	101		101		70-130	0		30
Trichloroethene	101		100		70-130	1		30
1,2-Dichlorobenzene	102		104		70-130	2		30
1,3-Dichlorobenzene	105		106		70-130	1		30
1,4-Dichlorobenzene	104		104		70-130	0		30
Methyl tert butyl ether	96		98		66-130	2		30
p/m-Xylene	106		107		70-130	1		30
o-Xylene	105		106		70-130	1		30
cis-1,2-Dichloroethene	100		100		70-130	0		30
Dibromomethane	94		98		70-130	4		30
Styrene	106		108		70-130	2		30
Dichlorodifluoromethane	99		99		30-146	0		30
Acetone	94		98		54-140	4		30
Carbon disulfide	96		95		59-130	1		30
2-Butanone	92		96		70-130	4		30
Vinyl acetate	95		97		70-130	2		30
4-Methyl-2-pentanone	90		92		70-130	2		30
1,2,3-Trichloropropane	98		100		68-130	2		30
2-Hexanone	90		94		70-130	4		30
Bromochloromethane	100		100		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1195747-3 WG1195747-4								
2,2-Dichloropropane	104		104		70-130	0		30
1,2-Dibromoethane	98		101		70-130	3		30
1,3-Dichloropropane	99		101		69-130	2		30
1,1,1,2-Tetrachloroethane	103		105		70-130	2		30
Bromobenzene	102		105		70-130	3		30
n-Butylbenzene	109		111		70-130	2		30
sec-Butylbenzene	110		111		70-130	1		30
tert-Butylbenzene	108		110		70-130	2		30
o-Chlorotoluene	108		111		70-130	3		30
p-Chlorotoluene	107		108		70-130	1		30
1,2-Dibromo-3-chloropropane	90		96		68-130	6		30
Hexachlorobutadiene	108		109		67-130	1		30
Isopropylbenzene	108		109		70-130	1		30
p-Isopropyltoluene	110		111		70-130	1		30
Naphthalene	97		102		70-130	5		30
Acrylonitrile	92		98		70-130	6		30
n-Propylbenzene	108		110		70-130	2		30
1,2,3-Trichlorobenzene	100		103		70-130	3		30
1,2,4-Trichlorobenzene	102		105		70-130	3		30
1,3,5-Trimethylbenzene	108		109		70-130	1		30
1,2,4-Trimethylbenzene	108		108		70-130	0		30
1,4-Dioxane	94		100		65-136	6		30
p-Diethylbenzene	108		108		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1195747-3 WG1195747-4								
p-Ethyltoluene	108		109		70-130	1		30
1,2,4,5-Tetramethylbenzene	108		108		70-130	0		30
Ethyl ether	97		98		67-130	1		30
trans-1,4-Dichloro-2-butene	98		100		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	93		92		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	94		94		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1195498-6 WG1195498-7 QC Sample: L1900324-02 Client ID: RB21_2-4												
Methylene chloride	ND	107	98	91		110	104		70-130	14		30
1,1-Dichloroethane	ND	107	120	114		130	122		70-130	8		30
Chloroform	ND	107	98	92		110	101		70-130	11		30
Carbon tetrachloride	ND	107	120	115		140	128		70-130	12		30
1,2-Dichloropropane	ND	107	110	103		120	115		70-130	12		30
Dibromochloromethane	ND	107	93	86		110	102		70-130	17		30
1,1,2-Trichloroethane	ND	107	84	78		96	88		70-130	13		30
Tetrachloroethene	ND	107	86	81		110	105		70-130	28		30
Chlorobenzene	ND	107	70	66	Q	96	89		70-130	31	Q	30
Trichlorofluoromethane	ND	107	140	130		140	132		70-139	3		30
1,2-Dichloroethane	ND	107	100	93		110	105		70-130	13		30
1,1,1-Trichloroethane	ND	107	120	115		130	124		70-130	9		30
Bromodichloromethane	ND	107	95	89		110	101		70-130	14		30
trans-1,3-Dichloropropene	ND	107	76	71		97	90		70-130	24		30
cis-1,3-Dichloropropene	ND	107	86	80		110	98		70-130	21		30
1,1-Dichloropropene	ND	107	110	100		120	115		70-130	15		30
Bromoform	ND	107	82	77		100	96		70-130	23		30
1,1,2,2-Tetrachloroethane	ND	107	71	67	Q	83	77		70-130	16		30
Benzene	ND	107	96	90		110	101		70-130	12		30
Toluene	ND	107	84	78		110	97		70-130	23		30
Ethylbenzene	ND	107	73	68	Q	100	96		70-130	35	Q	30
Chloromethane	ND	107	180	166	Q	190	176	Q	52-130	7		30
Bromomethane	ND	107	150	137		170	161	Q	57-147	17		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1195498-6 WG1195498-7 QC Sample: L1900324-02 Client ID: RB21_2-4												
Vinyl chloride	ND	107	180	168	Q	190	176	Q	67-130	5		30
Chloroethane	ND	107	190	179	Q	200	180	Q	50-151	2		30
1,1-Dichloroethene	ND	107	61	57	Q	63	58	Q	65-135	2		30
trans-1,2-Dichloroethene	ND	107	100	97		120	111		70-130	14		30
Trichloroethene	ND	107	100	93		120	111		70-130	18		30
1,2-Dichlorobenzene	ND	107	50	46	Q	77	71		70-130	43	Q	30
1,3-Dichlorobenzene	ND	107	46	43	Q	78	72		70-130	51	Q	30
1,4-Dichlorobenzene	ND	107	43	40	Q	74	68	Q	70-130	53	Q	30
Methyl tert butyl ether	ND	107	100	93		110	98		66-130	6		30
p/m-Xylene	ND	214	140	65	Q	200	93		70-130	37	Q	30
o-Xylene	ND	214	150	68	Q	200	93		70-130	32	Q	30
cis-1,2-Dichloroethene	ND	107	96	89		110	104		70-130	16		30
Dibromomethane	ND	107	82	76		99	91		70-130	19		30
Styrene	ND	214	130	61	Q	190	87		70-130	36	Q	30
Dichlorodifluoromethane	ND	107	190	179	Q	200	186	Q	30-146	5		30
Acetone	ND	107	120	107		110	98		54-140	8		30
Carbon disulfide	ND	107	79	73		59	54	Q	59-130	29		30
2-Butanone	ND	107	110	99		110	105		70-130	7		30
Vinyl acetate	ND	107	50	46	Q	44	40	Q	70-130	13		30
4-Methyl-2-pentanone	ND	107	110	104		120	112		70-130	9		30
1,2,3-Trichloropropane	ND	107	71	66	Q	85	78		68-130	18		30
2-Hexanone	ND	107	96	89		110	97		70-130	9		30
Bromochloromethane	ND	107	95	88		110	101		70-130	14		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1195498-6 WG1195498-7 QC Sample: L1900324-02 Client ID: RB21_2-4												
2,2-Dichloropropane	ND	107	120	110		130	117		70-130	7		30
1,2-Dibromoethane	ND	107	80	74		96	88		70-130	18		30
1,3-Dichloropropane	ND	107	80	74		93	86		69-130	15		30
1,1,1,2-Tetrachloroethane	ND	107	93	87		110	104		70-130	18		30
Bromobenzene	ND	107	58	54	Q	84	78		70-130	37	Q	30
n-Butylbenzene	ND	107	35	33	Q	73	68	Q	70-130	70	Q	30
sec-Butylbenzene	ND	107	49	45	Q	84	78		70-130	54	Q	30
tert-Butylbenzene	ND	107	60	56	Q	96	89		70-130	46	Q	30
o-Chlorotoluene	ND	107	54	50	Q	87	80		70-130	47	Q	30
p-Chlorotoluene	ND	107	48	44	Q	82	76		70-130	54	Q	30
1,2-Dibromo-3-chloropropane	ND	107	75	70		90	83		68-130	17		30
Hexachlorobutadiene	ND	107	24	22	Q	44	40	Q	67-130	58	Q	30
Isopropylbenzene	ND	107	61	57	Q	96	88		70-130	44	Q	30
p-Isopropyltoluene	ND	107	46	43	Q	87	80		70-130	62	Q	30
Naphthalene	ND	107	48	45	Q	64	59	Q	70-130	28		30
Acrylonitrile	ND	107	110	99		120	114		70-130	15		30
n-Propylbenzene	ND	107	52	48	Q	91	84		70-130	56	Q	30
1,2,3-Trichlorobenzene	ND	107	35	33	Q	52	48	Q	70-130	38	Q	30
1,2,4-Trichlorobenzene	ND	107	32	30	Q	53	49	Q	70-130	49	Q	30
1,3,5-Trimethylbenzene	ND	107	53	49	Q	87	80		70-130	49	Q	30
1,2,4-Trimethylbenzene	ND	107	49	46	Q	85	78		70-130	53	Q	30
1,4-Dioxane	ND	5350	5400	101		5700	106		65-136	5		30
p-Diethylbenzene	ND	107	39	36	Q	79	73		70-130	68	Q	30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1195498-6 WG1195498-7 QC Sample: L1900324-02 Client ID: RB21_2-4												
p-Ethyltoluene	ND	107	48	44	Q	86	79		70-130	57	Q	30
1,2,4,5-Tetramethylbenzene	ND	107	40	38	Q	71	66	Q	70-130	55	Q	30
Ethyl ether	ND	107	100	97		110	97		67-130	1		30
trans-1,4-Dichloro-2-butene	ND	107	80	75		110	97		70-130	27		30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		107		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	101		102		70-130
Toluene-d8	100		99		70-130



SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01 D
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 10:47
 Analyst: ALS
 Percent Solids: 92%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	660		ug/kg	280	37.	2
1,2,4-Trichlorobenzene	ND		ug/kg	360	41.	2
Hexachlorobenzene	ND		ug/kg	210	40.	2
Bis(2-chloroethyl)ether	ND		ug/kg	320	48.	2
2-Chloronaphthalene	ND		ug/kg	360	35.	2
1,2-Dichlorobenzene	ND		ug/kg	360	64.	2
1,3-Dichlorobenzene	ND		ug/kg	360	61.	2
1,4-Dichlorobenzene	ND		ug/kg	360	62.	2
3,3'-Dichlorobenzidine	ND		ug/kg	360	95.	2
2,4-Dinitrotoluene	ND		ug/kg	360	71.	2
2,6-Dinitrotoluene	ND		ug/kg	360	61.	2
Fluoranthene	12000		ug/kg	210	41.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	360	38.	2
4-Bromophenyl phenyl ether	ND		ug/kg	360	54.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	430	61.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	390	36.	2
Hexachlorobutadiene	ND		ug/kg	360	52.	2
Hexachlorocyclopentadiene	ND		ug/kg	1000	320	2
Hexachloroethane	ND		ug/kg	280	58.	2
Isophorone	ND		ug/kg	320	46.	2
Naphthalene	410		ug/kg	360	44.	2
Nitrobenzene	ND		ug/kg	320	53.	2
NDPA/DPA	ND		ug/kg	280	41.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	360	55.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	360	120	2
Butyl benzyl phthalate	ND		ug/kg	360	90.	2
Di-n-butylphthalate	ND		ug/kg	360	68.	2
Di-n-octylphthalate	ND		ug/kg	360	120	2

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-01 D

Date Collected: 01/03/19 11:30

Client ID: RB21_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	360	33.	2
Dimethyl phthalate	ND		ug/kg	360	75.	2
Benzo(a)anthracene	5900		ug/kg	210	40.	2
Benzo(a)pyrene	5100		ug/kg	280	87.	2
Benzo(b)fluoranthene	6300		ug/kg	210	60.	2
Benzo(k)fluoranthene	2300		ug/kg	210	57.	2
Chrysene	6000		ug/kg	210	37.	2
Acenaphthylene	220	J	ug/kg	280	55.	2
Anthracene	1700		ug/kg	210	70.	2
Benzo(ghi)perylene	3200		ug/kg	280	42.	2
Fluorene	670		ug/kg	360	35.	2
Phenanthrene	9900		ug/kg	210	43.	2
Dibenzo(a,h)anthracene	820		ug/kg	210	41.	2
Indeno(1,2,3-cd)pyrene	3500		ug/kg	280	50.	2
Pyrene	11000		ug/kg	210	36.	2
Biphenyl	ND		ug/kg	810	83.	2
4-Chloroaniline	ND		ug/kg	360	65.	2
2-Nitroaniline	ND		ug/kg	360	69.	2
3-Nitroaniline	ND		ug/kg	360	67.	2
4-Nitroaniline	ND		ug/kg	360	150	2
Dibenzofuran	520		ug/kg	360	34.	2
2-Methylnaphthalene	230	J	ug/kg	430	43.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	360	37.	2
Acetophenone	ND		ug/kg	360	44.	2
2,4,6-Trichlorophenol	ND		ug/kg	210	68.	2
p-Chloro-m-cresol	ND		ug/kg	360	53.	2
2-Chlorophenol	ND		ug/kg	360	42.	2
2,4-Dichlorophenol	ND		ug/kg	320	57.	2
2,4-Dimethylphenol	ND		ug/kg	360	120	2
2-Nitrophenol	ND		ug/kg	770	130	2
4-Nitrophenol	ND		ug/kg	500	140	2
2,4-Dinitrophenol	ND		ug/kg	1700	170	2
4,6-Dinitro-o-cresol	ND		ug/kg	930	170	2
Pentachlorophenol	ND		ug/kg	280	79.	2
Phenol	ND		ug/kg	360	54.	2
2-Methylphenol	ND		ug/kg	360	55.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	510	56.	2

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01 D
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	360	68.	2
Benzoic Acid	ND		ug/kg	1200	360	2
Benzyl Alcohol	ND		ug/kg	360	110	2
Carbazole	850		ug/kg	360	35.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	87		30-120
2,4,6-Tribromophenol	12		10-136
4-Terphenyl-d14	88		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/05/19 17:12
 Analyst: ALS
 Percent Solids: 95%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	280		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	150	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	23	J	ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-02

Date Collected: 01/03/19 11:35

Client ID: RB21_2-4

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	120		ug/kg	100	19.	1
Benzo(a)pyrene	120	J	ug/kg	140	42.	1
Benzo(b)fluoranthene	180		ug/kg	100	29.	1
Benzo(k)fluoranthene	46	J	ug/kg	100	27.	1
Chrysene	140		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	80	J	ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	130		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	85	J	ug/kg	140	24.	1
Pyrene	290		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	71.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	820	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	82.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	27.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
Client ID: RB21_2-4
Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	16.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	65		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	71		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 11:38
 Analyst: ALS
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	28	J	ug/kg	130	17.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	30.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	29.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	440		ug/kg	100	19.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	150	1
Hexachloroethane	ND		ug/kg	130	27.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	23	J	ug/kg	170	20.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	130	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	58.	1
Butyl benzyl phthalate	ND		ug/kg	170	42.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	57.	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	35.	1
Benzo(a)anthracene	230		ug/kg	100	19.	1
Benzo(a)pyrene	190		ug/kg	130	41.	1
Benzo(b)fluoranthene	240		ug/kg	100	28.	1
Benzo(k)fluoranthene	85	J	ug/kg	100	27.	1
Chrysene	220		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	130	26.	1
Anthracene	59	J	ug/kg	100	33.	1
Benzo(ghi)perylene	120	J	ug/kg	130	20.	1
Fluorene	26	J	ug/kg	170	16.	1
Phenanthrene	370		ug/kg	100	20.	1
Dibenzo(a,h)anthracene	36	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	140		ug/kg	130	24.	1
Pyrene	420		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	380	39.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	32.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	21	J	ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	360	63.	1
4-Nitrophenol	ND		ug/kg	240	69.	1
2,4-Dinitrophenol	ND		ug/kg	810	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	81.	1
Pentachlorophenol	ND		ug/kg	130	37.	1
Phenol	ND		ug/kg	170	25.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	32.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	32	J	ug/kg	170	16.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	53		10-136
4-Terphenyl-d14	69		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/06/19 01:43
 Analyst: SZ
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	89	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	2400		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	63	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-04

Date Collected: 01/03/19 13:00

Client ID: RB22_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	1100		ug/kg	110	20.	1
Benzo(a)pyrene	1100		ug/kg	140	44.	1
Benzo(b)fluoranthene	1400		ug/kg	110	30.	1
Benzo(k)fluoranthene	520		ug/kg	110	29.	1
Chrysene	1100		ug/kg	110	19.	1
Acenaphthylene	160		ug/kg	140	28.	1
Anthracene	260		ug/kg	110	35.	1
Benzo(ghi)perylene	710		ug/kg	140	21.	1
Fluorene	79	J	ug/kg	180	18.	1
Phenanthrene	1400		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	170		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	750		ug/kg	140	25.	1
Pyrene	2000		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	63	J	ug/kg	180	17.	1
2-Methylnaphthalene	30	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
Client ID: RB22_0-2
Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	120	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		25-120
Phenol-d6	57		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	48		10-136
4-Terphenyl-d14	53		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/05/19 23:35
 Analyst: SZ
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	180		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	62	J	ug/kg	110	20.	1
Benzo(a)pyrene	48	J	ug/kg	140	44.	1
Benzo(b)fluoranthene	85	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	67	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	32	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	100	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	29	J	ug/kg	140	25.	1
Pyrene	160		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		25-120
Phenol-d6	47		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	56		30-120
2,4,6-Tribromophenol	22		10-136
4-Terphenyl-d14	40		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/06/19 02:09
 Analyst: SZ
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	91	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	1800		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	130	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	1200		ug/kg	110	21.	1
Benzo(a)pyrene	1300		ug/kg	150	45.	1
Benzo(b)fluoranthene	1700		ug/kg	110	31.	1
Benzo(k)fluoranthene	600		ug/kg	110	29.	1
Chrysene	1200		ug/kg	110	19.	1
Acenaphthylene	710		ug/kg	150	28.	1
Anthracene	360		ug/kg	110	36.	1
Benzo(ghi)perylene	1200		ug/kg	150	22.	1
Fluorene	82	J	ug/kg	180	18.	1
Phenanthrene	960		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	250		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	1200		ug/kg	150	26.	1
Pyrene	1500		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	72	J	ug/kg	180	17.	1
2-Methylnaphthalene	67	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
Client ID: RB19_0-2
Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	120	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	59		10-136
4-Terphenyl-d14	50		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/05/19 23:09
 Analyst: SZ
 Percent Solids: 57%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	660	86.	1
1,2,4-Trichlorobenzene	ND		ug/kg	830	95.	1
Hexachlorobenzene	ND		ug/kg	500	93.	1
Bis(2-chloroethyl)ether	ND		ug/kg	750	110	1
2-Chloronaphthalene	ND		ug/kg	830	82.	1
1,2-Dichlorobenzene	ND		ug/kg	830	150	1
1,3-Dichlorobenzene	ND		ug/kg	830	140	1
1,4-Dichlorobenzene	ND		ug/kg	830	140	1
3,3'-Dichlorobenzidine	ND		ug/kg	830	220	1
2,4-Dinitrotoluene	ND		ug/kg	830	160	1
2,6-Dinitrotoluene	ND		ug/kg	830	140	1
Fluoranthene	440	J	ug/kg	500	95.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	830	89.	1
4-Bromophenyl phenyl ether	ND		ug/kg	830	130	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	1000	140	1
Bis(2-chloroethoxy)methane	ND		ug/kg	900	83.	1
Hexachlorobutadiene	ND		ug/kg	830	120	1
Hexachlorocyclopentadiene	ND		ug/kg	2400	750	1
Hexachloroethane	ND		ug/kg	660	130	1
Isophorone	ND		ug/kg	750	110	1
Naphthalene	300	J	ug/kg	830	100	1
Nitrobenzene	ND		ug/kg	750	120	1
NDPA/DPA	ND		ug/kg	660	94.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	830	130	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	830	290	1
Butyl benzyl phthalate	ND		ug/kg	830	210	1
Di-n-butylphthalate	ND		ug/kg	830	160	1
Di-n-octylphthalate	ND		ug/kg	830	280	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-07

Date Collected: 01/03/19 14:05

Client ID: RB19_20-22

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	830	77.	1
Dimethyl phthalate	ND		ug/kg	830	170	1
Benzo(a)anthracene	200	J	ug/kg	500	93.	1
Benzo(a)pyrene	250	J	ug/kg	660	200	1
Benzo(b)fluoranthene	230	J	ug/kg	500	140	1
Benzo(k)fluoranthene	ND		ug/kg	500	130	1
Chrysene	190	J	ug/kg	500	86.	1
Acenaphthylene	ND		ug/kg	660	130	1
Anthracene	ND		ug/kg	500	160	1
Benzo(ghi)perylene	180	J	ug/kg	660	98.	1
Fluorene	ND		ug/kg	830	81.	1
Phenanthrene	170	J	ug/kg	500	100	1
Dibenzo(a,h)anthracene	ND		ug/kg	500	96.	1
Indeno(1,2,3-cd)pyrene	140	J	ug/kg	660	120	1
Pyrene	570		ug/kg	500	82.	1
Biphenyl	ND		ug/kg	1900	190	1
4-Chloroaniline	ND		ug/kg	830	150	1
2-Nitroaniline	ND		ug/kg	830	160	1
3-Nitroaniline	ND		ug/kg	830	160	1
4-Nitroaniline	ND		ug/kg	830	340	1
Dibenzofuran	ND		ug/kg	830	78.	1
2-Methylnaphthalene	ND		ug/kg	1000	100	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	830	87.	1
Acetophenone	ND		ug/kg	830	100	1
2,4,6-Trichlorophenol	ND		ug/kg	500	160	1
p-Chloro-m-cresol	ND		ug/kg	830	120	1
2-Chlorophenol	ND		ug/kg	830	98.	1
2,4-Dichlorophenol	ND		ug/kg	750	130	1
2,4-Dimethylphenol	ND		ug/kg	830	270	1
2-Nitrophenol	ND		ug/kg	1800	310	1
4-Nitrophenol	ND		ug/kg	1200	340	1
2,4-Dinitrophenol	ND		ug/kg	4000	390	1
4,6-Dinitro-o-cresol	ND		ug/kg	2200	400	1
Pentachlorophenol	ND		ug/kg	660	180	1
Phenol	ND		ug/kg	830	120	1
2-Methylphenol	ND		ug/kg	830	130	1
3-Methylphenol/4-Methylphenol	370	J	ug/kg	1200	130	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	830	160	1
Benzoic Acid	ND		ug/kg	2700	840	1
Benzyl Alcohol	ND		ug/kg	830	250	1
Carbazole	ND		ug/kg	830	81.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	51		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/06/19 00:26
 Analyst: SZ
 Percent Solids: 66%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	33	J	ug/kg	200	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	240	28.	1
Hexachlorobenzene	ND		ug/kg	150	28.	1
Bis(2-chloroethyl)ether	ND		ug/kg	220	33.	1
2-Chloronaphthalene	ND		ug/kg	240	24.	1
1,2-Dichlorobenzene	ND		ug/kg	240	44.	1
1,3-Dichlorobenzene	ND		ug/kg	240	42.	1
1,4-Dichlorobenzene	ND		ug/kg	240	43.	1
3,3'-Dichlorobenzidine	ND		ug/kg	240	65.	1
2,4-Dinitrotoluene	ND		ug/kg	240	49.	1
2,6-Dinitrotoluene	ND		ug/kg	240	42.	1
Fluoranthene	480		ug/kg	150	28.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	240	26.	1
4-Bromophenyl phenyl ether	ND		ug/kg	240	38.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	300	42.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	260	25.	1
Hexachlorobutadiene	ND		ug/kg	240	36.	1
Hexachlorocyclopentadiene	ND		ug/kg	700	220	1
Hexachloroethane	ND		ug/kg	200	40.	1
Isophorone	ND		ug/kg	220	32.	1
Naphthalene	240		ug/kg	240	30.	1
Nitrobenzene	ND		ug/kg	220	36.	1
NDPA/DPA	ND		ug/kg	200	28.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	240	38.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	240	85.	1
Butyl benzyl phthalate	ND		ug/kg	240	62.	1
Di-n-butylphthalate	ND		ug/kg	240	47.	1
Di-n-octylphthalate	ND		ug/kg	240	84.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	240	23.	1
Dimethyl phthalate	ND		ug/kg	240	52.	1
Benzo(a)anthracene	380		ug/kg	150	28.	1
Benzo(a)pyrene	580		ug/kg	200	60.	1
Benzo(b)fluoranthene	580		ug/kg	150	41.	1
Benzo(k)fluoranthene	180		ug/kg	150	39.	1
Chrysene	370		ug/kg	150	26.	1
Acenaphthylene	61	J	ug/kg	200	38.	1
Anthracene	130	J	ug/kg	150	48.	1
Benzo(ghi)perylene	370		ug/kg	200	29.	1
Fluorene	58	J	ug/kg	240	24.	1
Phenanthrene	270		ug/kg	150	30.	1
Dibenzo(a,h)anthracene	60	J	ug/kg	150	28.	1
Indeno(1,2,3-cd)pyrene	340		ug/kg	200	34.	1
Pyrene	540		ug/kg	150	24.	1
Biphenyl	ND		ug/kg	560	57.	1
4-Chloroaniline	ND		ug/kg	240	45.	1
2-Nitroaniline	ND		ug/kg	240	47.	1
3-Nitroaniline	ND		ug/kg	240	46.	1
4-Nitroaniline	ND		ug/kg	240	100	1
Dibenzofuran	33	J	ug/kg	240	23.	1
2-Methylnaphthalene	50	J	ug/kg	300	30.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	26.	1
Acetophenone	ND		ug/kg	240	30.	1
2,4,6-Trichlorophenol	ND		ug/kg	150	47.	1
p-Chloro-m-cresol	ND		ug/kg	240	37.	1
2-Chlorophenol	ND		ug/kg	240	29.	1
2,4-Dichlorophenol	ND		ug/kg	220	40.	1
2,4-Dimethylphenol	ND		ug/kg	240	81.	1
2-Nitrophenol	ND		ug/kg	530	92.	1
4-Nitrophenol	ND		ug/kg	340	100	1
2,4-Dinitrophenol	ND		ug/kg	1200	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	640	120	1
Pentachlorophenol	ND		ug/kg	200	54.	1
Phenol	ND		ug/kg	240	37.	1
2-Methylphenol	ND		ug/kg	240	38.	1
3-Methylphenol/4-Methylphenol	190	J	ug/kg	350	38.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	240	47.	1
Benzoic Acid	ND		ug/kg	800	250	1
Benzyl Alcohol	ND		ug/kg	240	75.	1
Carbazole	ND		ug/kg	240	24.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	67		10-136
4-Terphenyl-d14	49		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/05/19 11:26
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04-08 Batch: WG1194798-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/05/19 11:26
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04-08 Batch: WG1194798-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/05/19 11:26
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04-08 Batch: WG1194798-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	67		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/10/19 08:14
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1196085-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	140	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	18.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	170	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	140	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	140	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/10/19 08:14
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1196085-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	39.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	31.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	22.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	37.
4-Chloroaniline	ND		ug/kg	160	29.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	30.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	140	26.
2,4-Dimethylphenol	ND		ug/kg	160	53.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/10/19 08:14
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1196085-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	75.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	520	160
Benzyl Alcohol	ND		ug/kg	160	49.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	90		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 Batch: WG1194798-2 WG1194798-3								
Acenaphthene	64		66		31-137	3		50
1,2,4-Trichlorobenzene	78		73		38-107	7		50
Hexachlorobenzene	72		69		40-140	4		50
Bis(2-chloroethyl)ether	73		75		40-140	3		50
2-Chloronaphthalene	78		77		40-140	1		50
1,2-Dichlorobenzene	71		75		40-140	5		50
1,3-Dichlorobenzene	73		75		40-140	3		50
1,4-Dichlorobenzene	72		74		28-104	3		50
3,3'-Dichlorobenzidine	52		55		40-140	6		50
2,4-Dinitrotoluene	80		84		40-132	5		50
2,6-Dinitrotoluene	88		88		40-140	0		50
Fluoranthene	72		78		40-140	8		50
4-Chlorophenyl phenyl ether	71		64		40-140	10		50
4-Bromophenyl phenyl ether	70		70		40-140	0		50
Bis(2-chloroisopropyl)ether	67		65		40-140	3		50
Bis(2-chloroethoxy)methane	71		70		40-117	1		50
Hexachlorobutadiene	72		72		40-140	0		50
Hexachlorocyclopentadiene	76		77		40-140	1		50
Hexachloroethane	74		71		40-140	4		50
Isophorone	75		70		40-140	7		50
Naphthalene	71		75		40-140	5		50
Nitrobenzene	78		74		40-140	5		50
NDPA/DPA	71		75		36-157	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 Batch: WG1194798-2 WG1194798-3								
n-Nitrosodi-n-propylamine	71		70		32-121	1		50
Bis(2-ethylhexyl)phthalate	89		92		40-140	3		50
Butyl benzyl phthalate	86		87		40-140	1		50
Di-n-butylphthalate	86		76		40-140	12		50
Di-n-octylphthalate	81		83		40-140	2		50
Diethyl phthalate	77		68		40-140	12		50
Dimethyl phthalate	76		79		40-140	4		50
Benzo(a)anthracene	72		73		40-140	1		50
Benzo(a)pyrene	82		71		40-140	14		50
Benzo(b)fluoranthene	80		71		40-140	12		50
Benzo(k)fluoranthene	80		70		40-140	13		50
Chrysene	74		75		40-140	1		50
Acenaphthylene	76		80		40-140	5		50
Anthracene	77		79		40-140	3		50
Benzo(ghi)perylene	75		77		40-140	3		50
Fluorene	74		66		40-140	11		50
Phenanthrene	75		76		40-140	1		50
Dibenzo(a,h)anthracene	73		77		40-140	5		50
Indeno(1,2,3-cd)pyrene	75		68		40-140	10		50
Pyrene	71		76		35-142	7		50
Biphenyl	80		77		54-104	4		50
4-Chloroaniline	57		60		40-140	5		50
2-Nitroaniline	93		94		47-134	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 Batch: WG1194798-2 WG1194798-3								
3-Nitroaniline	55		57		26-129	4		50
4-Nitroaniline	76		65		41-125	16		50
Dibenzofuran	69		71		40-140	3		50
2-Methylnaphthalene	77		73		40-140	5		50
1,2,4,5-Tetrachlorobenzene	81		82		40-117	1		50
Acetophenone	77		75		14-144	3		50
2,4,6-Trichlorophenol	89		87		30-130	2		50
p-Chloro-m-cresol	84		83		26-103	1		50
2-Chlorophenol	84		84		25-102	0		50
2,4-Dichlorophenol	88		87		30-130	1		50
2,4-Dimethylphenol	87		81		30-130	7		50
2-Nitrophenol	97		93		30-130	4		50
4-Nitrophenol	74		78		11-114	5		50
2,4-Dinitrophenol	87		90		4-130	3		50
4,6-Dinitro-o-cresol	94		81		10-130	15		50
Pentachlorophenol	82		84		17-109	2		50
Phenol	75		76		26-90	1		50
2-Methylphenol	81		78		30-130.	4		50
3-Methylphenol/4-Methylphenol	86		85		30-130	1		50
2,4,5-Trichlorophenol	86		85		30-130	1		50
Benzoic Acid	60		72		10-110	18		50
Benzyl Alcohol	75		78		40-140	4		50
Carbazole	72		78		54-128	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 Batch: WG1194798-2 WG1194798-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	72		84		25-120
Phenol-d6	80		81		10-120
Nitrobenzene-d5	80		76		23-120
2-Fluorobiphenyl	75		74		30-120
2,4,6-Tribromophenol	77		79		10-136
4-Terphenyl-d14	66		65		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1196085-2 WG1196085-3								
Acenaphthene	86		81		31-137	6		50
1,2,4-Trichlorobenzene	82		76		38-107	8		50
Hexachlorobenzene	91		83		40-140	9		50
Bis(2-chloroethyl)ether	67		62		40-140	8		50
2-Chloronaphthalene	89		82		40-140	8		50
1,2-Dichlorobenzene	76		72		40-140	5		50
1,3-Dichlorobenzene	77		72		40-140	7		50
1,4-Dichlorobenzene	77		73		28-104	5		50
3,3'-Dichlorobenzidine	64		61		40-140	5		50
2,4-Dinitrotoluene	97		91		40-132	6		50
2,6-Dinitrotoluene	95		89		40-140	7		50
Fluoranthene	91		87		40-140	4		50
4-Chlorophenyl phenyl ether	90		84		40-140	7		50
4-Bromophenyl phenyl ether	91		84		40-140	8		50
Bis(2-chloroisopropyl)ether	76		69		40-140	10		50
Bis(2-chloroethoxy)methane	74		69		40-117	7		50
Hexachlorobutadiene	84		79		40-140	6		50
Hexachlorocyclopentadiene	83		75		40-140	10		50
Hexachloroethane	75		69		40-140	8		50
Isophorone	75		69		40-140	8		50
Naphthalene	80		75		40-140	6		50
Nitrobenzene	74		68		40-140	8		50
NDPA/DPA	91		86		36-157	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1196085-2 WG1196085-3								
n-Nitrosodi-n-propylamine	75		69		32-121	8		50
Bis(2-ethylhexyl)phthalate	96		90		40-140	6		50
Butyl benzyl phthalate	95		91		40-140	4		50
Di-n-butylphthalate	96		91		40-140	5		50
Di-n-octylphthalate	98		93		40-140	5		50
Diethyl phthalate	90		84		40-140	7		50
Dimethyl phthalate	90		85		40-140	6		50
Benzo(a)anthracene	89		84		40-140	6		50
Benzo(a)pyrene	92		87		40-140	6		50
Benzo(b)fluoranthene	91		84		40-140	8		50
Benzo(k)fluoranthene	86		84		40-140	2		50
Chrysene	85		81		40-140	5		50
Acenaphthylene	90		84		40-140	7		50
Anthracene	90		86		40-140	5		50
Benzo(ghi)perylene	87		82		40-140	6		50
Fluorene	88		82		40-140	7		50
Phenanthrene	86		83		40-140	4		50
Dibenzo(a,h)anthracene	88		83		40-140	6		50
Indeno(1,2,3-cd)pyrene	92		86		40-140	7		50
Pyrene	90		87		35-142	3		50
Biphenyl	91		86		54-104	6		50
4-Chloroaniline	45		52		40-140	14		50
2-Nitroaniline	101		93		47-134	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1196085-2 WG1196085-3								
3-Nitroaniline	65		64		26-129	2		50
4-Nitroaniline	90		85		41-125	6		50
Dibenzofuran	86		80		40-140	7		50
2-Methylnaphthalene	87		81		40-140	7		50
1,2,4,5-Tetrachlorobenzene	91		85		40-117	7		50
Acetophenone	80		74		14-144	8		50
2,4,6-Trichlorophenol	101		91		30-130	10		50
p-Chloro-m-cresol	90		84		26-103	7		50
2-Chlorophenol	87		81		25-102	7		50
2,4-Dichlorophenol	95		88		30-130	8		50
2,4-Dimethylphenol	86		82		30-130	5		50
2-Nitrophenol	94		86		30-130	9		50
4-Nitrophenol	93		92		11-114	1		50
2,4-Dinitrophenol	80		74		4-130	8		50
4,6-Dinitro-o-cresol	94		85		10-130	10		50
Pentachlorophenol	88		83		17-109	6		50
Phenol	77		73		26-90	5		50
2-Methylphenol	84		79		30-130.	6		50
3-Methylphenol/4-Methylphenol	83		83		30-130	0		50
2,4,5-Trichlorophenol	102		95		30-130	7		50
Benzoic Acid	53		50		10-110	6		50
Benzyl Alcohol	79		72		40-140	9		50
Carbazole	91		88		54-128	3		50

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1196085-2 WG1196085-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	82		78		25-120
Phenol-d6	84		78		10-120
Nitrobenzene-d5	77		72		23-120
2-Fluorobiphenyl	92		85		30-120
2,4,6-Tribromophenol	96		89		10-136
4-Terphenyl-d14	92		88		18-120

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 QC Batch ID: WG1194798-4 WG1194798-5 QC Sample: L1900324-02 Client ID: RB21_2-4												
Acenaphthene	ND	1370	840	61		850	62		31-137	1		50
1,2,4-Trichlorobenzene	ND	1370	850	62		940	69		38-107	10		50
Hexachlorobenzene	ND	1370	840	61		850	62		40-140	1		50
Bis(2-chloroethyl)ether	ND	1370	800	59		900	66		40-140	12		50
2-Chloronaphthalene	ND	1370	840	61		980	72		40-140	15		50
1,2-Dichlorobenzene	ND	1370	890	65		920	67		40-140	3		50
1,3-Dichlorobenzene	ND	1370	780	57		920	67		40-140	16		50
1,4-Dichlorobenzene	ND	1370	880	64		910	67		28-104	3		50
3,3'-Dichlorobenzidine	ND	1370	750	55		860	63		40-140	14		50
2,4-Dinitrotoluene	ND	1370	980	72		920	67		40-132	6		50
2,6-Dinitrotoluene	ND	1370	900	66		980	72		40-140	9		50
Fluoranthene	280	1370	990	52		1100	60		40-140	11		50
4-Chlorophenyl phenyl ether	ND	1370	890	65		840	62		40-140	6		50
4-Bromophenyl phenyl ether	ND	1370	830	61		850	62		40-140	2		50
Bis(2-chloroisopropyl)ether	ND	1370	770	56		830	61		40-140	8		50
Bis(2-chloroethoxy)methane	ND	1370	830	61		900	66		40-117	8		50
Hexachlorobutadiene	ND	1370	840	61		880	64		40-140	5		50
Hexachlorocyclopentadiene	ND	1370	280J	20	Q	300J	22	Q	40-140	7		50
Hexachloroethane	ND	1370	770	56		830	61		40-140	8		50
Isophorone	ND	1370	820	60		890	65		40-140	8		50
Naphthalene	23J	1370	930	68		960	70		40-140	3		50
Nitrobenzene	ND	1370	910	67		920	67		40-140	1		50
NDPA/DPA	ND	1370	820	60		870	64		36-157	6		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 QC Batch ID: WG1194798-4 WG1194798-5 QC Sample: L1900324-02 Client ID: RB21_2-4												
n-Nitrosodi-n-propylamine	ND	1370	820	60		870	64		32-121	6		50
Bis(2-ethylhexyl)phthalate	ND	1370	1000	73		1100	81		40-140	10		50
Butyl benzyl phthalate	ND	1370	810	59		1000	73		40-140	21		50
Di-n-butylphthalate	ND	1370	990	72		1000	73		40-140	1		50
Di-n-octylphthalate	ND	1370	1300	95		1100	81		40-140	17		50
Diethyl phthalate	ND	1370	960	70		900	66		40-140	6		50
Dimethyl phthalate	ND	1370	810	59		960	70		40-140	17		50
Benzo(a)anthracene	120	1370	940	60		1000	64		40-140	6		50
Benzo(a)pyrene	120J	1370	1200	88		1000	73		40-140	18		50
Benzo(b)fluoranthene	180	1370	1200	75		1000	60		40-140	18		50
Benzo(k)fluoranthene	46J	1370	1000	73		980	72		40-140	2		50
Chrysene	140	1370	920	57		980	62		40-140	6		50
Acenaphthylene	ND	1370	850	62		1000	73		40-140	16		50
Anthracene	ND	1370	980	72		1000	73		40-140	2		50
Benzo(ghi)perylene	80J	1370	910	67		890	65		40-140	2		50
Fluorene	ND	1370	980	72		900	66		40-140	9		50
Phenanthrene	130	1370	1000	64		1000	64		40-140	0		50
Dibenzo(a,h)anthracene	ND	1370	840	61		810	59		40-140	4		50
Indeno(1,2,3-cd)pyrene	85J	1370	920	67		910	67		40-140	1		50
Pyrene	290	1370	940	48		1100	59		35-142	16		50
Biphenyl	ND	1370	860	63		1000	73		54-104	15		50
4-Chloroaniline	ND	1370	700	51		790	58		40-140	12		50
2-Nitroaniline	ND	1370	1000	73		1200	88		47-134	18		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 QC Batch ID: WG1194798-4 WG1194798-5 QC Sample: L1900324-02												
Client ID: RB21_2-4												
3-Nitroaniline	ND	1370	830	61		880	64		26-129	6		50
4-Nitroaniline	ND	1370	930	68		900	66		41-125	3		50
Dibenzofuran	ND	1370	890	65		910	67		40-140	2		50
2-Methylnaphthalene	ND	1370	800	59		940	69		40-140	16		50
1,2,4,5-Tetrachlorobenzene	ND	1370	870	64		1000	73		40-117	14		50
Acetophenone	ND	1370	910	67		960	70		14-144	5		50
2,4,6-Trichlorophenol	ND	1370	940	69		1000	73		30-130	6		50
p-Chloro-m-cresol	ND	1370	830	61		1000	73		26-103	19		50
2-Chlorophenol	ND	1370	900	66		1000	73		25-102	11		50
2,4-Dichlorophenol	ND	1370	980	72		1100	81		30-130	12		50
2,4-Dimethylphenol	ND	1370	880	64		950	70		30-130	8		50
2-Nitrophenol	ND	1370	980	72		970	71		30-130	1		50
4-Nitrophenol	ND	1370	920	67		860	63		11-114	7		50
2,4-Dinitrophenol	ND	1370	160J	12		160J	12		4-130	0		50
4,6-Dinitro-o-cresol	ND	1370	210J	15		190J	14		10-130	10		50
Pentachlorophenol	ND	1370	1100	80		880	64		17-109	22		50
Phenol	ND	1370	830	61		950	70		26-90	13		50
2-Methylphenol	ND	1370	920	67		970	71		30-130.	5		50
3-Methylphenol/4-Methylphenol	ND	1370	980	72		1000	73		30-130	2		50
2,4,5-Trichlorophenol	ND	1370	910	67		1100	81		30-130	19		50
Benzoic Acid	ND	1370	ND	0	Q	ND	0	Q	10-110	NC		50
Benzyl Alcohol	ND	1370	930	68		970	71		40-140	4		50
Carbazole	ND	1370	980	72		1000	73		54-128	2		50

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 QC Batch ID: WG1194798-4 WG1194798-5 QC Sample: L1900324-02
Client ID: RB21_2-4

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	69		72		10-136
2-Fluorobiphenyl	59		70		30-120
2-Fluorophenol	58		74		25-120
4-Terphenyl-d14	49		60		18-120
Nitrobenzene-d5	69		71		23-120
Phenol-d6	63		74		10-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 06:00
 Analyst: WR
 Percent Solids: 92%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.0	3.10	1	A
Aroclor 1221	ND		ug/kg	35.0	3.50	1	A
Aroclor 1232	ND		ug/kg	35.0	7.41	1	A
Aroclor 1242	ND		ug/kg	35.0	4.71	1	A
Aroclor 1248	ND		ug/kg	35.0	5.24	1	A
Aroclor 1254	ND		ug/kg	35.0	3.82	1	A
Aroclor 1260	ND		ug/kg	35.0	6.46	1	A
Aroclor 1262	ND		ug/kg	35.0	4.44	1	A
Aroclor 1268	ND		ug/kg	35.0	3.62	1	A
PCBs, Total	ND		ug/kg	35.0	3.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	46		30-150	B
Decachlorobiphenyl	33		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 05:23
 Analyst: WR
 Percent Solids: 95%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.2	2.95	1	A
Aroclor 1221	ND		ug/kg	33.2	3.33	1	A
Aroclor 1232	ND		ug/kg	33.2	7.04	1	A
Aroclor 1242	ND		ug/kg	33.2	4.48	1	A
Aroclor 1248	ND		ug/kg	33.2	4.98	1	A
Aroclor 1254	ND		ug/kg	33.2	3.64	1	A
Aroclor 1260	ND		ug/kg	33.2	6.14	1	A
Aroclor 1262	ND		ug/kg	33.2	4.22	1	A
Aroclor 1268	ND		ug/kg	33.2	3.44	1	A
PCBs, Total	ND		ug/kg	33.2	2.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	40		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 06:12
 Analyst: WR
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.1	3.03	1	A
Aroclor 1221	ND		ug/kg	34.1	3.42	1	A
Aroclor 1232	ND		ug/kg	34.1	7.24	1	A
Aroclor 1242	ND		ug/kg	34.1	4.60	1	A
Aroclor 1248	ND		ug/kg	34.1	5.12	1	A
Aroclor 1254	ND		ug/kg	34.1	3.74	1	A
Aroclor 1260	ND		ug/kg	34.1	6.31	1	A
Aroclor 1262	ND		ug/kg	34.1	4.34	1	A
Aroclor 1268	ND		ug/kg	34.1	3.54	1	A
PCBs, Total	ND		ug/kg	34.1	3.03	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	40		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 06:24
 Analyst: WR
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.9	3.10	1	A
Aroclor 1221	ND		ug/kg	34.9	3.49	1	A
Aroclor 1232	ND		ug/kg	34.9	7.39	1	A
Aroclor 1242	ND		ug/kg	34.9	4.70	1	A
Aroclor 1248	ND		ug/kg	34.9	5.23	1	A
Aroclor 1254	ND		ug/kg	34.9	3.82	1	A
Aroclor 1260	ND		ug/kg	34.9	6.44	1	A
Aroclor 1262	ND		ug/kg	34.9	4.43	1	A
Aroclor 1268	ND		ug/kg	34.9	3.61	1	A
PCBs, Total	ND		ug/kg	34.9	3.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	53		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 06:37
 Analyst: WR
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.3	3.14	1	A
Aroclor 1221	ND		ug/kg	35.3	3.54	1	A
Aroclor 1232	ND		ug/kg	35.3	7.49	1	A
Aroclor 1242	ND		ug/kg	35.3	4.76	1	A
Aroclor 1248	ND		ug/kg	35.3	5.30	1	A
Aroclor 1254	ND		ug/kg	35.3	3.87	1	A
Aroclor 1260	ND		ug/kg	35.3	6.53	1	A
Aroclor 1262	ND		ug/kg	35.3	4.49	1	A
Aroclor 1268	ND		ug/kg	35.3	3.66	1	A
PCBs, Total	ND		ug/kg	35.3	3.14	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	49		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 06:49
 Analyst: WR
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.8	3.18	1	A
Aroclor 1221	ND		ug/kg	35.8	3.59	1	A
Aroclor 1232	ND		ug/kg	35.8	7.59	1	A
Aroclor 1242	ND		ug/kg	35.8	4.83	1	A
Aroclor 1248	ND		ug/kg	35.8	5.37	1	A
Aroclor 1254	ND		ug/kg	35.8	3.92	1	A
Aroclor 1260	ND		ug/kg	35.8	6.62	1	A
Aroclor 1262	ND		ug/kg	35.8	4.55	1	A
Aroclor 1268	ND		ug/kg	35.8	3.71	1	A
PCBs, Total	ND		ug/kg	35.8	3.18	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	51		30-150	B
Decachlorobiphenyl	35		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 07:02
 Analyst: WR
 Percent Solids: 57%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	146	13.0	1	A
Aroclor 1221	ND		ug/kg	146	14.6	1	A
Aroclor 1232	ND		ug/kg	146	31.0	1	A
Aroclor 1242	ND		ug/kg	146	19.7	1	A
Aroclor 1248	ND		ug/kg	146	21.9	1	A
Aroclor 1254	ND		ug/kg	146	16.0	1	A
Aroclor 1260	ND		ug/kg	146	27.0	1	A
Aroclor 1262	ND		ug/kg	146	18.6	1	A
Aroclor 1268	ND		ug/kg	146	15.1	1	A
PCBs, Total	ND		ug/kg	146	13.0	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	45		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 07:14
 Analyst: WR
 Percent Solids: 66%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	48.9	4.34	1	A
Aroclor 1221	ND		ug/kg	48.9	4.90	1	A
Aroclor 1232	ND		ug/kg	48.9	10.4	1	A
Aroclor 1242	ND		ug/kg	48.9	6.59	1	A
Aroclor 1248	ND		ug/kg	48.9	7.33	1	A
Aroclor 1254	14.6	J	ug/kg	48.9	5.35	1	A
Aroclor 1260	ND		ug/kg	48.9	9.03	1	A
Aroclor 1262	ND		ug/kg	48.9	6.21	1	A
Aroclor 1268	ND		ug/kg	48.9	5.06	1	A
PCBs, Total	14.6	J	ug/kg	48.9	4.34	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	45		30-150	A
Decachlorobiphenyl	42		30-150	A
2,4,5,6-Tetrachloro-m-xylene	42		30-150	B
Decachlorobiphenyl	30		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/06/19 20:27
 Analyst: HT

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-08 Batch: WG1194865-1						
Aroclor 1016	ND		ug/kg	32.2	2.86	A
Aroclor 1221	ND		ug/kg	32.2	3.22	A
Aroclor 1232	ND		ug/kg	32.2	6.82	A
Aroclor 1242	ND		ug/kg	32.2	4.33	A
Aroclor 1248	ND		ug/kg	32.2	4.82	A
Aroclor 1254	ND		ug/kg	32.2	3.52	A
Aroclor 1260	ND		ug/kg	32.2	5.94	A
Aroclor 1262	ND		ug/kg	32.2	4.08	A
Aroclor 1268	ND		ug/kg	32.2	3.33	A
PCBs, Total	ND		ug/kg	32.2	2.86	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	71		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG1194865-2 WG1194865-3									
Aroclor 1016	78		70		40-140	11		50	A
Aroclor 1260	65		62		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		60		30-150	A
Decachlorobiphenyl	58		56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		64		30-150	B
Decachlorobiphenyl	71		68		30-150	B



Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194865-4 WG1194865-5 QC Sample: L1900324-02 Client ID: RB21_2-4													
Aroclor 1016	ND	207	158	76		169	82		40-140	7		50	A
Aroclor 1260	ND	207	147	71		157	76		40-140	7		50	A

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
2,4,5,6-Tetrachloro-m-xylene	63		66		30-150	A
Decachlorobiphenyl	53		58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		64		30-150	B
Decachlorobiphenyl	42		45		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 16:17
 Analyst: BM
 Percent Solids: 92%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.68	0.328	1	A
Lindane	ND		ug/kg	0.699	0.312	1	A
Alpha-BHC	ND		ug/kg	0.699	0.198	1	A
Beta-BHC	ND		ug/kg	1.68	0.636	1	A
Heptachlor	ND		ug/kg	0.839	0.376	1	A
Aldrin	ND		ug/kg	1.68	0.591	1	A
Heptachlor epoxide	ND		ug/kg	3.14	0.944	1	A
Endrin	ND		ug/kg	0.699	0.286	1	A
Endrin aldehyde	ND		ug/kg	2.10	0.734	1	A
Endrin ketone	ND		ug/kg	1.68	0.432	1	A
Dieldrin	ND		ug/kg	1.05	0.524	1	A
4,4'-DDE	ND		ug/kg	1.68	0.388	1	A
4,4'-DDD	ND		ug/kg	1.68	0.598	1	A
4,4'-DDT	ND		ug/kg	3.14	1.35	1	A
Endosulfan I	ND		ug/kg	1.68	0.396	1	A
Endosulfan II	3.79	IP	ug/kg	1.68	0.560	1	A
Endosulfan sulfate	ND		ug/kg	0.699	0.333	1	A
Methoxychlor	ND		ug/kg	3.14	0.978	1	A
Toxaphene	ND		ug/kg	31.4	8.81	1	A
cis-Chlordane	ND		ug/kg	2.10	0.584	1	A
trans-Chlordane	ND		ug/kg	2.10	0.554	1	A
Chlordane	ND		ug/kg	13.6	5.56	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103		30-150	B
Decachlorobiphenyl	97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	136		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 22:18
 Analyst: \DGM
 Percent Solids: 92%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	179	11.3	1	A
2,4,5-T	ND		ug/kg	179	5.55	1	A
2,4,5-TP (Silvex)	ND		ug/kg	179	4.76	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	84		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/05/19 15:20
 Analyst: KEG
 Percent Solids: 95%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.61	0.315	1	A
Lindane	ND		ug/kg	0.670	0.299	1	A
Alpha-BHC	ND		ug/kg	0.670	0.190	1	A
Beta-BHC	ND		ug/kg	1.61	0.609	1	A
Heptachlor	ND		ug/kg	0.804	0.360	1	A
Aldrin	ND		ug/kg	1.61	0.566	1	A
Heptachlor epoxide	ND		ug/kg	3.01	0.904	1	A
Endrin	ND		ug/kg	0.670	0.274	1	A
Endrin aldehyde	ND		ug/kg	2.01	0.703	1	A
Endrin ketone	ND		ug/kg	1.61	0.414	1	A
Dieldrin	ND		ug/kg	1.00	0.502	1	A
4,4'-DDE	ND		ug/kg	1.61	0.372	1	A
4,4'-DDD	ND		ug/kg	1.61	0.573	1	A
4,4'-DDT	ND		ug/kg	3.01	1.29	1	A
Endosulfan I	ND		ug/kg	1.61	0.380	1	A
Endosulfan II	ND		ug/kg	1.61	0.537	1	A
Endosulfan sulfate	ND		ug/kg	0.670	0.319	1	A
Methoxychlor	ND		ug/kg	3.01	0.937	1	A
Toxaphene	ND		ug/kg	30.1	8.44	1	A
cis-Chlordane	ND		ug/kg	2.01	0.560	1	A
trans-Chlordane	ND		ug/kg	2.01	0.530	1	A
Chlordane	ND		ug/kg	13.0	5.32	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-02

Date Collected: 01/03/19 11:35

Client ID: RB21_2-4

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	70		30-150	B
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	77		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 22:37
 Analyst: \DGM
 Percent Solids: 95%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	174	11.0	1	A
2,4,5-T	ND		ug/kg	174	5.39	1	A
2,4,5-TP (Silvex)	ND		ug/kg	174	4.62	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	84		30-150	A
DCAA	70		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 16:30
 Analyst: BM
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.62	0.318	1	A
Lindane	ND		ug/kg	0.676	0.302	1	A
Alpha-BHC	ND		ug/kg	0.676	0.192	1	A
Beta-BHC	ND		ug/kg	1.62	0.615	1	A
Heptachlor	ND		ug/kg	0.812	0.364	1	A
Aldrin	ND		ug/kg	1.62	0.571	1	A
Heptachlor epoxide	ND		ug/kg	3.04	0.913	1	A
Endrin	ND		ug/kg	0.676	0.277	1	A
Endrin aldehyde	ND		ug/kg	2.03	0.710	1	A
Endrin ketone	ND		ug/kg	1.62	0.418	1	A
Dieldrin	ND		ug/kg	1.01	0.507	1	A
4,4'-DDE	ND		ug/kg	1.62	0.375	1	A
4,4'-DDD	ND		ug/kg	1.62	0.579	1	A
4,4'-DDT	ND		ug/kg	3.04	1.30	1	A
Endosulfan I	ND		ug/kg	1.62	0.383	1	A
Endosulfan II	0.810	JIP	ug/kg	1.62	0.542	1	A
Endosulfan sulfate	ND		ug/kg	0.676	0.322	1	A
Methoxychlor	ND		ug/kg	3.04	0.947	1	A
Toxaphene	ND		ug/kg	30.4	8.52	1	A
cis-Chlordane	ND		ug/kg	2.03	0.565	1	A
trans-Chlordane	ND		ug/kg	2.03	0.536	1	A
Chlordane	ND		ug/kg	13.2	5.38	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	112		30-150	B
Decachlorobiphenyl	92		30-150	B
2,4,5,6-Tetrachloro-m-xylene	104		30-150	A
Decachlorobiphenyl	78		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 22:56
 Analyst: \DGM
 Percent Solids: 96%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	173	10.9	1	A
2,4,5-T	ND		ug/kg	173	5.35	1	A
2,4,5-TP (Silvex)	ND		ug/kg	173	4.59	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	85		30-150	A
DCAA	79		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 16:42
 Analyst: BM
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.346	1	A
Lindane	ND		ug/kg	0.737	0.330	1	A
Alpha-BHC	ND		ug/kg	0.737	0.209	1	A
Beta-BHC	ND		ug/kg	1.77	0.671	1	A
Heptachlor	ND		ug/kg	0.885	0.397	1	A
Aldrin	ND		ug/kg	1.77	0.623	1	A
Heptachlor epoxide	ND		ug/kg	3.32	0.995	1	A
Endrin	ND		ug/kg	0.737	0.302	1	A
Endrin aldehyde	ND		ug/kg	2.21	0.774	1	A
Endrin ketone	ND		ug/kg	1.77	0.456	1	A
Dieldrin	ND		ug/kg	1.10	0.553	1	A
4,4'-DDE	ND		ug/kg	1.77	0.409	1	A
4,4'-DDD	ND		ug/kg	1.77	0.631	1	A
4,4'-DDT	ND		ug/kg	3.32	1.42	1	A
Endosulfan I	ND		ug/kg	1.77	0.418	1	A
Endosulfan II	ND	IP	ug/kg	1.77	0.591	1	A
Endosulfan sulfate	ND		ug/kg	0.737	0.351	1	A
Methoxychlor	ND		ug/kg	3.32	1.03	1	A
Toxaphene	ND		ug/kg	33.2	9.29	1	A
cis-Chlordane	ND		ug/kg	2.21	0.616	1	A
trans-Chlordane	ND		ug/kg	2.21	0.584	1	A
Chlordane	ND		ug/kg	14.4	5.86	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	105		30-150	B
Decachlorobiphenyl	90		30-150	B
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	92		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 23:14
 Analyst: \DGM
 Percent Solids: 90%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.70	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.89	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 16:55
 Analyst: BM
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.346	1	A
Lindane	ND		ug/kg	0.737	0.329	1	A
Alpha-BHC	ND		ug/kg	0.737	0.209	1	A
Beta-BHC	ND		ug/kg	1.77	0.670	1	A
Heptachlor	ND		ug/kg	0.884	0.396	1	A
Aldrin	ND		ug/kg	1.77	0.623	1	A
Heptachlor epoxide	ND		ug/kg	3.32	0.995	1	A
Endrin	ND		ug/kg	0.737	0.302	1	A
Endrin aldehyde	ND		ug/kg	2.21	0.774	1	A
Endrin ketone	ND		ug/kg	1.77	0.455	1	A
Dieldrin	ND		ug/kg	1.10	0.553	1	A
4,4'-DDE	0.619	JIP	ug/kg	1.77	0.409	1	A
4,4'-DDD	ND		ug/kg	1.77	0.631	1	A
4,4'-DDT	ND		ug/kg	3.32	1.42	1	A
Endosulfan I	ND		ug/kg	1.77	0.418	1	A
Endosulfan II	ND		ug/kg	1.77	0.591	1	A
Endosulfan sulfate	ND		ug/kg	0.737	0.351	1	A
Methoxychlor	ND		ug/kg	3.32	1.03	1	A
Toxaphene	ND		ug/kg	33.2	9.28	1	A
cis-Chlordane	ND		ug/kg	2.21	0.616	1	A
trans-Chlordane	ND		ug/kg	2.21	0.584	1	A
Chlordane	ND		ug/kg	14.4	5.86	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	84		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	70		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 23:33
 Analyst: \DGM
 Percent Solids: 90%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	185	11.6	1	A
2,4,5-T	ND		ug/kg	185	5.72	1	A
2,4,5-TP (Silvex)	ND		ug/kg	185	4.91	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 17:07
 Analyst: BM
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.71	0.334	1	A
Lindane	ND		ug/kg	0.711	0.318	1	A
Alpha-BHC	ND		ug/kg	0.711	0.202	1	A
Beta-BHC	ND		ug/kg	1.71	0.647	1	A
Heptachlor	ND		ug/kg	0.854	0.383	1	A
Aldrin	ND		ug/kg	1.71	0.601	1	A
Heptachlor epoxide	ND		ug/kg	3.20	0.960	1	A
Endrin	ND		ug/kg	0.711	0.292	1	A
Endrin aldehyde	ND		ug/kg	2.13	0.747	1	A
Endrin ketone	ND		ug/kg	1.71	0.440	1	A
Dieldrin	ND		ug/kg	1.07	0.533	1	A
4,4'-DDE	ND		ug/kg	1.71	0.395	1	A
4,4'-DDD	ND		ug/kg	1.71	0.609	1	A
4,4'-DDT	ND		ug/kg	3.20	1.37	1	A
Endosulfan I	ND		ug/kg	1.71	0.403	1	A
Endosulfan II	ND	IP	ug/kg	1.71	0.570	1	A
Endosulfan sulfate	ND		ug/kg	0.711	0.338	1	A
Methoxychlor	ND		ug/kg	3.20	0.996	1	A
Toxaphene	ND		ug/kg	32.0	8.96	1	A
cis-Chlordane	ND		ug/kg	2.13	0.595	1	A
trans-Chlordane	ND		ug/kg	2.13	0.563	1	A
Chlordane	ND		ug/kg	13.9	5.65	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	70		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 23:52
 Analyst: \DGM
 Percent Solids: 89%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.66	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 17:20
 Analyst: BM
 Percent Solids: 57%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	7.25	1.42	1	A
Lindane	ND		ug/kg	3.02	1.35	1	A
Alpha-BHC	ND		ug/kg	3.02	0.857	1	A
Beta-BHC	ND		ug/kg	7.25	2.75	1	A
Heptachlor	ND		ug/kg	3.62	1.62	1	A
Aldrin	ND		ug/kg	7.25	2.55	1	A
Heptachlor epoxide	ND		ug/kg	13.6	4.08	1	A
Endrin	ND		ug/kg	3.02	1.24	1	A
Endrin aldehyde	ND		ug/kg	9.06	3.17	1	A
Endrin ketone	ND		ug/kg	7.25	1.86	1	A
Dieldrin	ND		ug/kg	4.53	2.26	1	A
4,4'-DDE	ND		ug/kg	7.25	1.68	1	A
4,4'-DDD	ND		ug/kg	7.25	2.58	1	A
4,4'-DDT	ND		ug/kg	13.6	5.83	1	A
Endosulfan I	ND		ug/kg	7.25	1.71	1	A
Endosulfan II	ND		ug/kg	7.25	2.42	1	A
Endosulfan sulfate	ND		ug/kg	3.02	1.44	1	A
Methoxychlor	ND		ug/kg	13.6	4.23	1	A
Toxaphene	ND		ug/kg	136	38.0	1	A
cis-Chlordane	ND		ug/kg	9.06	2.52	1	A
trans-Chlordane	ND		ug/kg	9.06	2.39	1	A
Chlordane	ND		ug/kg	58.9	24.0	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	105		30-150	B
Decachlorobiphenyl	101		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1650	Q	30-150	A
Decachlorobiphenyl	67		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/07/19 00:11
 Analyst: \DGM
 Percent Solids: 57%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	285	18.0	1	A
2,4,5-T	ND		ug/kg	285	8.84	1	A
2,4,5-TP (Silvex)	ND		ug/kg	285	7.59	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	83		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 17:32
 Analyst: BM
 Percent Solids: 66%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.33	0.456	1	A
Lindane	ND		ug/kg	0.971	0.434	1	A
Alpha-BHC	ND		ug/kg	0.971	0.276	1	A
Beta-BHC	ND		ug/kg	2.33	0.883	1	A
Heptachlor	ND		ug/kg	1.16	0.522	1	A
Aldrin	ND		ug/kg	2.33	0.820	1	A
Heptachlor epoxide	ND		ug/kg	4.37	1.31	1	A
Endrin	ND		ug/kg	0.971	0.398	1	A
Endrin aldehyde	ND		ug/kg	2.91	1.02	1	A
Endrin ketone	ND		ug/kg	2.33	0.600	1	A
Dieldrin	ND		ug/kg	1.46	0.728	1	A
4,4'-DDE	ND		ug/kg	2.33	0.539	1	A
4,4'-DDD	ND		ug/kg	2.33	0.831	1	A
4,4'-DDT	ND		ug/kg	4.37	1.87	1	A
Endosulfan I	ND		ug/kg	2.33	0.550	1	A
Endosulfan II	ND		ug/kg	2.33	0.778	1	A
Endosulfan sulfate	ND		ug/kg	0.971	0.462	1	A
Methoxychlor	ND		ug/kg	4.37	1.36	1	A
Toxaphene	ND		ug/kg	43.7	12.2	1	A
cis-Chlordane	ND		ug/kg	2.91	0.812	1	A
trans-Chlordane	ND		ug/kg	2.91	0.769	1	A
Chlordane	ND		ug/kg	18.9	7.72	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	82		30-150	B
2,4,5,6-Tetrachloro-m-xylene	5140	Q	30-150	A
Decachlorobiphenyl	39		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/07/19 00:30
 Analyst: \DGM
 Percent Solids: 66%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	244	15.4	1	A
2,4,5-T	ND		ug/kg	244	7.56	1	A
2,4,5-TP (Silvex)	ND		ug/kg	244	6.49	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	96		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/05/19 14:16
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 12:07
Cleanup Method: EPA 3620B
Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-08 Batch: WG1194837-1						
Delta-BHC	ND		ug/kg	1.55	0.303	A
Lindane	ND		ug/kg	0.646	0.288	A
Alpha-BHC	ND		ug/kg	0.646	0.183	A
Beta-BHC	ND		ug/kg	1.55	0.587	A
Heptachlor	ND		ug/kg	0.775	0.347	A
Aldrin	ND		ug/kg	1.55	0.546	A
Heptachlor epoxide	ND		ug/kg	2.90	0.872	A
Endrin	ND		ug/kg	0.646	0.265	A
Endrin aldehyde	ND		ug/kg	1.94	0.678	A
Endrin ketone	ND		ug/kg	1.55	0.399	A
Dieldrin	ND		ug/kg	0.968	0.484	A
4,4'-DDE	ND		ug/kg	1.55	0.358	A
4,4'-DDD	ND		ug/kg	1.55	0.553	A
4,4'-DDT	ND		ug/kg	2.90	1.24	A
Endosulfan I	ND		ug/kg	1.55	0.366	A
Endosulfan II	ND		ug/kg	1.55	0.518	A
Endosulfan sulfate	ND		ug/kg	0.646	0.307	A
Methoxychlor	ND		ug/kg	2.90	0.904	A
Toxaphene	ND		ug/kg	29.0	8.13	A
cis-Chlordane	ND		ug/kg	1.94	0.540	A
trans-Chlordane	ND		ug/kg	1.94	0.511	A
Chlordane	ND		ug/kg	12.6	5.13	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
Analytical Date: 01/05/19 14:16
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 12:07
Cleanup Method: EPA 3620B
Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-08 Batch: WG1194837-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	94		30-150	B
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	100		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/06/19 20:06
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Methylation Date: 01/05/19 20:45

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-08 Batch: WG1194983-1						
2,4-D	ND		ug/kg	166	10.4	A
2,4,5-T	ND		ug/kg	166	5.14	A
2,4,5-TP (Silvex)	ND		ug/kg	166	4.41	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	90		30-150	A
DCAA	84		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG1194837-2 WG1194837-3									
Delta-BHC	98		104		30-150	6		30	A
Lindane	103		107		30-150	4		30	A
Alpha-BHC	110		114		30-150	4		30	A
Beta-BHC	93		106		30-150	13		30	A
Heptachlor	106		109		30-150	3		30	A
Aldrin	96		100		30-150	4		30	A
Heptachlor epoxide	103		106		30-150	3		30	A
Endrin	107		113		30-150	5		30	A
Endrin aldehyde	71		82		30-150	14		30	A
Endrin ketone	94		106		30-150	12		30	A
Dieldrin	112		117		30-150	4		30	A
4,4'-DDE	97		100		30-150	3		30	A
4,4'-DDD	103		108		30-150	5		30	A
4,4'-DDT	108		113		30-150	5		30	A
Endosulfan I	93		96		30-150	3		30	A
Endosulfan II	95		104		30-150	9		30	A
Endosulfan sulfate	76		87		30-150	13		30	A
Methoxychlor	106		121		30-150	13		30	A
cis-Chlordane	78		81		30-150	4		30	A
trans-Chlordane	76		71		30-150	7		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG1194837-2 WG1194837-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	77		82		30-150	B
Decachlorobiphenyl	83		91		30-150	B
2,4,5,6-Tetrachloro-m-xylene	81		84		30-150	A
Decachlorobiphenyl	92		97		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG1194983-2 WG1194983-3									
2,4-D	90		93		30-150	3		30	A
2,4,5-T	96		100		30-150	4		30	A
2,4,5-TP (Silvex)	84		87		30-150	4		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	90		96		30-150	A
DCAA	87		91		30-150	B



Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab ID: RB21_2-4 Associated sample(s): 01-08 QC Batch ID: WG1194837-4 WG1194837-5 QC Sample: L1900324-02 Client													
Delta-BHC	ND	33.2	36.4P	110		35.3	105		30-150	3		50	A
Lindane	ND	33.2	37.0	111		37.5	111		30-150	1		50	A
Alpha-BHC	ND	33.2	38.4	116		39.2	116		30-150	2		50	A
Beta-BHC	ND	33.2	31.7	95		31.0	92		30-150	2		50	A
Heptachlor	ND	33.2	38.6P	116		37.7	112		30-150	2		50	A
Aldrin	ND	33.2	34.3	103		32.8	98		30-150	4		50	A
Heptachlor epoxide	ND	33.2	35.8P	108		35.1	104		30-150	2		50	A
Endrin	ND	33.2	37.6	113		37.3	111		30-150	1		50	A
Endrin aldehyde	ND	33.2	23.5	71		22.2	66		30-150	6		50	A
Endrin ketone	ND	33.2	32.8	99		31.7	94		30-150	3		50	A
Dieldrin	ND	33.2	39.4	119		38.8	115		30-150	2		50	A
4,4'-DDE	ND	33.2	29.2	88		29.2	87		30-150	0		50	A
4,4'-DDD	ND	33.2	34.2	103		34.4	102		30-150	1		50	A
4,4'-DDT	ND	33.2	36.6	110		36.7	109		30-150	0		50	A
Endosulfan I	ND	33.2	32.2	97		32.3	96		30-150	0		50	A
Endosulfan II	ND	33.2	33.6	101		33.1	98		30-150	1		50	A
Endosulfan sulfate	ND	33.2	24.0	72		23.6	70		30-150	2		50	A
Methoxychlor	ND	33.2	36.4	110		35.7	106		30-150	2		50	A
cis-Chlordane	ND	33.2	27.4	83		27.2	81		30-150	1		50	A
trans-Chlordane	ND	33.2	25.7	77		23.1	69		30-150	11		50	A

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194837-4 WG1194837-5 QC Sample: L1900324-02 Client ID: RB21_2-4

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	78		75		30-150	B
Decachlorobiphenyl	64		69		30-150	B
2,4,5,6-Tetrachloro-m-xylene	83		86		30-150	A
Decachlorobiphenyl	87		87		30-150	A

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194983-4 WG1194983-5 QC Sample: L1900324-02 Client ID: RB21_2-4													
2,4-D	ND	173	159J	92		161J	93		30-150	1		30	A
2,4,5-T	ND	173	175	101		178	103		30-150	2		30	A
2,4,5-TP (Silvex)	ND	173	153J	88		157J	91		30-150	3		30	A

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
DCAA	101		107		30-150	A
DCAA	87		92		30-150	B

METALS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01

Date Collected: 01/03/19 11:30

Client ID: RB21_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5110		mg/kg	8.49	2.29	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Antimony, Total	6.53		mg/kg	4.24	0.323	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Arsenic, Total	10.4		mg/kg	0.849	0.177	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Barium, Total	260		mg/kg	0.849	0.148	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Beryllium, Total	0.153	J	mg/kg	0.424	0.028	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Cadmium, Total	0.968		mg/kg	0.849	0.083	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Calcium, Total	34000		mg/kg	8.49	2.97	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Chromium, Total	10.9		mg/kg	0.849	0.082	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Cobalt, Total	4.56		mg/kg	1.70	0.141	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Copper, Total	47.0		mg/kg	0.849	0.219	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Iron, Total	15000		mg/kg	4.24	0.767	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Lead, Total	2940		mg/kg	4.24	0.228	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Magnesium, Total	4210		mg/kg	8.49	1.31	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Manganese, Total	241		mg/kg	0.849	0.135	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Mercury, Total	0.881		mg/kg	0.068	0.014	1	01/05/19 07:00	01/08/19 20:44	EPA 7471B	1,7471B	EA
Nickel, Total	10.7		mg/kg	2.12	0.205	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Potassium, Total	808		mg/kg	212	12.2	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Selenium, Total	1.38	J	mg/kg	1.70	0.219	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Silver, Total	0.450	J	mg/kg	0.849	0.240	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Sodium, Total	616		mg/kg	170	2.67	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.70	0.267	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Vanadium, Total	14.9		mg/kg	0.849	0.172	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Zinc, Total	874		mg/kg	4.24	0.249	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.87	0.87	1		01/08/19 01:07	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-02

Date Collected: 01/03/19 11:35

Client ID: RB21_2-4

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6910		mg/kg	8.28	2.23	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.14	0.314	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Arsenic, Total	9.28		mg/kg	0.828	0.172	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Barium, Total	153		mg/kg	0.828	0.144	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.414	0.027	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Cadmium, Total	0.712	J	mg/kg	0.828	0.081	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Calcium, Total	57200		mg/kg	8.28	2.90	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Chromium, Total	14.0		mg/kg	0.828	0.079	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Cobalt, Total	7.18		mg/kg	1.66	0.137	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Copper, Total	191		mg/kg	0.828	0.214	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Iron, Total	21500		mg/kg	41.4	7.47	20	01/04/19 18:55	01/08/19 03:46	EPA 3050B	1,6010D	MC
Lead, Total	304		mg/kg	4.14	0.222	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Magnesium, Total	5000		mg/kg	8.28	1.27	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Manganese, Total	236		mg/kg	0.828	0.132	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Mercury, Total	0.520		mg/kg	0.066	0.014	1	01/05/19 07:00	01/08/19 20:15	EPA 7471B	1,7471B	EA
Nickel, Total	13.8		mg/kg	2.07	0.200	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Potassium, Total	1680		mg/kg	207	11.9	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Selenium, Total	0.720	J	mg/kg	1.66	0.214	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Silver, Total	0.256	J	mg/kg	0.828	0.234	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Sodium, Total	270		mg/kg	166	2.61	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.66	0.261	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Vanadium, Total	21.5		mg/kg	0.828	0.168	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Zinc, Total	212		mg/kg	4.14	0.242	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	0.84	0.85	1		01/07/19 22:41	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	12200		mg/kg	8.22	2.22	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.11	0.312	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Arsenic, Total	1.37		mg/kg	0.822	0.171	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Barium, Total	142		mg/kg	0.822	0.143	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.411	0.027	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Cadmium, Total	0.485	J	mg/kg	0.822	0.081	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Calcium, Total	9590		mg/kg	8.22	2.88	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Chromium, Total	27.9		mg/kg	0.822	0.079	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Cobalt, Total	19.7		mg/kg	1.64	0.136	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Copper, Total	54.0		mg/kg	0.822	0.212	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Iron, Total	26400		mg/kg	4.11	0.742	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Lead, Total	19.6		mg/kg	4.11	0.220	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Magnesium, Total	10600		mg/kg	8.22	1.26	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Manganese, Total	312		mg/kg	0.822	0.131	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.066	0.014	1	01/05/19 07:00	01/08/19 20:46	EPA 7471B	1,7471B	EA
Nickel, Total	24.3		mg/kg	2.05	0.199	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Potassium, Total	6430		mg/kg	205	11.8	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Selenium, Total	0.567	J	mg/kg	1.64	0.212	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.822	0.232	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Sodium, Total	159	J	mg/kg	164	2.59	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.64	0.259	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Vanadium, Total	41.1		mg/kg	0.822	0.167	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Zinc, Total	78.5		mg/kg	4.11	0.241	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	28		mg/kg	0.83	0.83	1		01/08/19 01:11	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04

Date Collected: 01/03/19 13:00

Client ID: RB22_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4240		mg/kg	8.76	2.36	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.38	0.333	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Arsenic, Total	3.67		mg/kg	0.876	0.182	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Barium, Total	121		mg/kg	0.876	0.152	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Beryllium, Total	0.053	J	mg/kg	0.438	0.029	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Cadmium, Total	0.456	J	mg/kg	0.876	0.086	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Calcium, Total	35700		mg/kg	8.76	3.07	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Chromium, Total	9.84		mg/kg	0.876	0.084	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Cobalt, Total	4.45		mg/kg	1.75	0.145	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Copper, Total	32.5		mg/kg	0.876	0.226	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Iron, Total	10800		mg/kg	4.38	0.791	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Lead, Total	425		mg/kg	4.38	0.235	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Magnesium, Total	6820		mg/kg	8.76	1.35	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Manganese, Total	212		mg/kg	0.876	0.139	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Mercury, Total	0.318		mg/kg	0.070	0.015	1	01/05/19 07:00	01/08/19 20:48	EPA 7471B	1,7471B	EA
Nickel, Total	8.81		mg/kg	2.19	0.212	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Potassium, Total	866		mg/kg	219	12.6	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Selenium, Total	0.727	J	mg/kg	1.75	0.226	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.876	0.248	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Sodium, Total	185		mg/kg	175	2.76	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.75	0.276	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Vanadium, Total	13.3		mg/kg	0.876	0.178	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Zinc, Total	171		mg/kg	4.38	0.257	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	9.8		mg/kg	0.89	0.89	1		01/08/19 01:16	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	13100		mg/kg	8.85	2.39	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.43	0.336	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Arsenic, Total	2.43		mg/kg	0.885	0.184	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Barium, Total	187		mg/kg	0.885	0.154	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.443	0.029	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Cadmium, Total	0.620	J	mg/kg	0.885	0.087	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Calcium, Total	22800		mg/kg	8.85	3.10	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Chromium, Total	24.8		mg/kg	0.885	0.085	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Cobalt, Total	17.8		mg/kg	1.77	0.147	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Copper, Total	81.5		mg/kg	0.885	0.228	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Iron, Total	29900		mg/kg	4.43	0.800	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Lead, Total	77.4		mg/kg	4.43	0.237	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Magnesium, Total	11600		mg/kg	8.85	1.36	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Manganese, Total	376		mg/kg	0.885	0.141	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Mercury, Total	0.200		mg/kg	0.071	0.015	1	01/05/19 07:00	01/08/19 20:50	EPA 7471B	1,7471B	EA
Nickel, Total	24.7		mg/kg	2.21	0.214	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Potassium, Total	7630		mg/kg	221	12.8	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Selenium, Total	0.434	J	mg/kg	1.77	0.228	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.885	0.250	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Sodium, Total	315		mg/kg	177	2.79	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.77	0.279	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Vanadium, Total	38.9		mg/kg	0.885	0.180	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Zinc, Total	132		mg/kg	4.43	0.259	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	25		mg/kg	0.89	0.89	1		01/08/19 01:20	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9090		mg/kg	8.46	2.28	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.23	0.321	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Arsenic, Total	12.3		mg/kg	0.846	0.176	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Barium, Total	1210		mg/kg	0.846	0.147	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Beryllium, Total	0.068	J	mg/kg	0.423	0.028	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Cadmium, Total	0.778	J	mg/kg	0.846	0.083	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Calcium, Total	8680		mg/kg	8.46	2.96	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Chromium, Total	16.8		mg/kg	0.846	0.081	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Cobalt, Total	9.79		mg/kg	1.69	0.140	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Copper, Total	52.1		mg/kg	0.846	0.218	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Iron, Total	24800		mg/kg	4.23	0.764	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Lead, Total	366		mg/kg	4.23	0.227	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Magnesium, Total	4980		mg/kg	8.46	1.30	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Manganese, Total	400		mg/kg	0.846	0.134	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Mercury, Total	2.32		mg/kg	0.071	0.015	1	01/05/19 07:00	01/08/19 20:52	EPA 7471B	1,7471B	EA
Nickel, Total	14.5		mg/kg	2.11	0.205	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Potassium, Total	1750		mg/kg	211	12.2	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Selenium, Total	1.46	J	mg/kg	1.69	0.218	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.846	0.239	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Sodium, Total	215		mg/kg	169	2.66	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.69	0.266	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Vanadium, Total	24.2		mg/kg	0.846	0.172	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Zinc, Total	1200		mg/kg	4.23	0.248	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	16	J	mg/kg	0.90	0.90	1		01/08/19 01:25	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-07

Date Collected: 01/03/19 14:05

Client ID: RB19_20-22

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 57%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	14700		mg/kg	13.8	3.73	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	6.90	0.524	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Arsenic, Total	17.0		mg/kg	1.38	0.287	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Barium, Total	70.4		mg/kg	1.38	0.240	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Beryllium, Total	0.373	J	mg/kg	0.690	0.046	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Cadmium, Total	1.04	J	mg/kg	1.38	0.135	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Calcium, Total	3300		mg/kg	13.8	4.83	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Chromium, Total	40.0		mg/kg	1.38	0.132	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Cobalt, Total	11.2		mg/kg	2.76	0.229	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Copper, Total	78.2		mg/kg	1.38	0.356	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Iron, Total	30800		mg/kg	6.90	1.25	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Lead, Total	203		mg/kg	6.90	0.370	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Magnesium, Total	6350		mg/kg	13.8	2.12	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Manganese, Total	449		mg/kg	1.38	0.219	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Mercury, Total	4.38		mg/kg	0.218	0.046	2	01/05/19 07:00	01/09/19 00:01	EPA 7471B	1,7471B	EA
Nickel, Total	22.9		mg/kg	3.45	0.334	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Potassium, Total	2970		mg/kg	345	19.9	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Selenium, Total	1.62	J	mg/kg	2.76	0.356	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Silver, Total	0.497	J	mg/kg	1.38	0.391	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Sodium, Total	558		mg/kg	276	4.35	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.76	0.435	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Vanadium, Total	37.8		mg/kg	1.38	0.280	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Zinc, Total	177		mg/kg	6.90	0.404	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	40		mg/kg	1.4	1.4	1		01/08/19 01:30	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 66%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	13800		mg/kg	11.6	3.14	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	5.82	0.442	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Arsenic, Total	17.8		mg/kg	1.16	0.242	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Barium, Total	80.2		mg/kg	1.16	0.202	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Beryllium, Total	0.256	J	mg/kg	0.582	0.038	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Cadmium, Total	1.09	J	mg/kg	1.16	0.114	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Calcium, Total	2500		mg/kg	11.6	4.07	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Chromium, Total	36.8		mg/kg	1.16	0.112	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Cobalt, Total	10.9		mg/kg	2.33	0.193	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Copper, Total	96.5		mg/kg	1.16	0.300	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Iron, Total	29000		mg/kg	5.82	1.05	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Lead, Total	252		mg/kg	5.82	0.312	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Magnesium, Total	6020		mg/kg	11.6	1.79	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Manganese, Total	292		mg/kg	1.16	0.185	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Mercury, Total	3.75		mg/kg	0.095	0.020	1	01/05/19 07:00	01/08/19 21:00	EPA 7471B	1,7471B	EA
Nickel, Total	21.4		mg/kg	2.91	0.282	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Potassium, Total	2920		mg/kg	291	16.8	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Selenium, Total	1.36	J	mg/kg	2.33	0.300	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Silver, Total	0.663	J	mg/kg	1.16	0.329	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Sodium, Total	601		mg/kg	233	3.66	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.33	0.366	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Vanadium, Total	33.8		mg/kg	1.16	0.236	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Zinc, Total	226		mg/kg	5.82	0.341	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	37		mg/kg	1.2	1.2	1		01/08/19 01:34	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-08 Batch: WG1194873-1									
Aluminum, Total	ND	mg/kg	4.00	1.08	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Antimony, Total	ND	mg/kg	2.00	0.152	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Arsenic, Total	ND	mg/kg	0.400	0.083	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Barium, Total	ND	mg/kg	0.400	0.070	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Beryllium, Total	ND	mg/kg	0.200	0.013	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Cadmium, Total	ND	mg/kg	0.400	0.039	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Calcium, Total	ND	mg/kg	4.00	1.40	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Chromium, Total	ND	mg/kg	0.400	0.038	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Cobalt, Total	ND	mg/kg	0.800	0.066	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Copper, Total	ND	mg/kg	0.400	0.103	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Iron, Total	ND	mg/kg	2.00	0.361	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Lead, Total	ND	mg/kg	2.00	0.107	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Magnesium, Total	ND	mg/kg	4.00	0.616	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Manganese, Total	ND	mg/kg	0.400	0.064	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Nickel, Total	ND	mg/kg	1.00	0.097	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Potassium, Total	ND	mg/kg	100	5.76	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Selenium, Total	ND	mg/kg	0.800	0.103	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Silver, Total	ND	mg/kg	0.400	0.113	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Sodium, Total	ND	mg/kg	80.0	1.26	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Thallium, Total	ND	mg/kg	0.800	0.126	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Vanadium, Total	ND	mg/kg	0.400	0.081	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Zinc, Total	ND	mg/kg	2.00	0.117	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-08 Batch: WG1195001-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	01/05/19 07:00	01/08/19 20:11	1,7471B	EA



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1194873-2 SRM Lot Number: D102-540								
Aluminum, Total	66		-		49-150	-		
Antimony, Total	139		-		1-199	-		
Arsenic, Total	98		-		83-117	-		
Barium, Total	89		-		83-118	-		
Beryllium, Total	90		-		83-116	-		
Cadmium, Total	98		-		83-118	-		
Calcium, Total	84		-		82-118	-		
Chromium, Total	90		-		83-117	-		
Cobalt, Total	93		-		84-116	-		
Copper, Total	88		-		84-116	-		
Iron, Total	87		-		61-139	-		
Lead, Total	94		-		82-118	-		
Magnesium, Total	79		-		76-124	-		
Manganese, Total	89		-		82-118	-		
Nickel, Total	93		-		83-117	-		
Potassium, Total	75		-		70-130	-		
Selenium, Total	98		-		79-121	-		
Silver, Total	92		-		80-120	-		
Sodium, Total	92		-		74-126	-		
Thallium, Total	97		-		81-119	-		
Vanadium, Total	88		-		80-120	-		



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1194873-2 SRM Lot Number: D102-540					
Zinc, Total	94	-	81-118	-	
Total Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195001-2 SRM Lot Number: D102-540					
Mercury, Total	104	-	65-134	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1194873-3 WG1194873-4 QC Sample: L1900324-02 Client ID: RB21_2-4												
Aluminum, Total	6910	166	6630	0	Q	6160	0	Q	75-125	7		20
Antimony, Total	ND	41.5	30.6	74	Q	30.2	75		75-125	1		20
Arsenic, Total	9.28	9.96	23.3	141	Q	16.6	76		75-125	34	Q	20
Barium, Total	153	166	352	120		317	102		75-125	10		20
Beryllium, Total	ND	4.15	3.65	88		3.48	87		75-125	5		20
Cadmium, Total	0.712J	4.23	4.93	116		4.43	108		75-125	11		20
Calcium, Total	57200	830	78600	2580	Q	76500	2410	Q	75-125	3		20
Chromium, Total	14.0	16.6	28.9	90		25.8	74	Q	75-125	11		20
Cobalt, Total	7.18	41.5	44.6	90		40.3	83		75-125	10		20
Copper, Total	191	20.8	204	63	Q	208	85		75-125	2		20
Iron, Total	21500	83	35000	16300	Q	20000	0	Q	75-125	55	Q	20
Lead, Total	304	42.3	342	90		313	22	Q	75-125	9		20
Magnesium, Total	5000	830	7520	304	Q	5510	64	Q	75-125	31	Q	20
Manganese, Total	236	41.5	319	200	Q	268	80		75-125	17		20
Nickel, Total	13.8	41.5	50.9	89		45.0	78		75-125	12		20
Potassium, Total	1680	830	2830	138	Q	2310	79		75-125	20		20
Selenium, Total	0.720J	9.96	10.2	102		9.59	100		75-125	6		20
Silver, Total	0.256J	24.9	27.0	108		25.8	107		75-125	5		20
Sodium, Total	270	830	1090	99		1070	100		75-125	2		20
Thallium, Total	ND	9.96	6.96	70	Q	6.64	69	Q	75-125	5		20
Vanadium, Total	21.5	41.5	64.1	103		55.1	84		75-125	15		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1194873-3 WG1194873-4 QC Sample: L1900324-02 Client ID: RB21_2-4									
Zinc, Total	212	41.5	263	123	236	60	Q 75-125	11	20
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1195001-3 WG1195001-4 QC Sample: L1900324-02 Client ID: RB21_2-4									
Mercury, Total	0.520	0.133	0.663	108	0.688	127	Q 80-120	4	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
Client ID: RB21_0-2
Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.3		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	0.97	J	mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:37	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.867	0.173	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-02

Date Collected: 01/03/19 11:35

Client ID: RB21_2-4

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.7		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:38	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.845	0.169	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.2		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.832	0.166	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-04

Date Collected: 01/03/19 13:00

Client ID: RB22_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.0		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:42	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.889	0.178	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.7		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:43	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.892	0.178	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.7		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	0.24	J	mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:44	1,9010C/9012B	LH
Chromium, Hexavalent	0.293	J	mg/kg	0.902	0.180	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07

Date Collected: 01/03/19 14:05

Client ID: RB19_20-22

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	57.4		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.6	0.35	1	01/04/19 11:15	01/04/19 13:45	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.39	0.279	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	66.2		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.4	0.30	1	01/04/19 11:15	01/04/19 14:10	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.21	0.242	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG1194787-1									
Cyanide, Total	ND	mg/kg	0.99	0.21	1	01/04/19 11:15	01/04/19 13:20	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG1194953-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG1194787-2 WG1194787-3								
Cyanide, Total	48	Q	46	Q	80-120	3		35
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG1194953-2								
Chromium, Hexavalent	99		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194787-4 WG1194787-5 QC Sample: L1900324-02 Client ID: RB21_2-4												
Cyanide, Total	ND	10	10	96		9.3	95		75-125	7		35
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194953-4 WG1194953-5 QC Sample: L1900324-02 Client ID: RB21_2-4												
Chromium, Hexavalent	ND	901	960	107		1030	98		75-125	7		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194871-1 QC Sample: L1900324-02 Client ID: RB21_2-4						
Solids, Total	94.7	94.8	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194953-7 QC Sample: L1900324-02 Client ID: RB21_2-4						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01101913:48
Lab Number: L1900324
Report Date: 01/10/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-01A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-01B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-01C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-01D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-01F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-01G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-02A1	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-02A2	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-02B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02B1	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02B2	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02C1	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02C2	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-02D1	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-02D2	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-02E1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-02E2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-02F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02F1	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02F2	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02G1	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02G2	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-03A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-03B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-03C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-03D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01101913:48
Lab Number: L1900324
Report Date: 01/10/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-03F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-03G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-04A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-04B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-04C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-04D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-04F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-04G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-05A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-05B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-05C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-05D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-05F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-05G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-06A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-06B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-06C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-06D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-06F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-06G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-07A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-07B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-07C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-07D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-07F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-07G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-08A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-08B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-08C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-08D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01101913:48
Lab Number: L1900324
Report Date: 01/10/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-08F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-08G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-09A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260(14)
L1900324-09B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab 1/31/19	ALPHA Job # 21906324																																																																																	
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUiS (1 File) <input checked="" type="checkbox"/> EQUiS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #																																																																																
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																
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Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.				<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Part 375/TCL VOCs</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Part 375/TCL SVOCs</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Part 375/TCL PCBs</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Pesticides</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Herbicides</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">TAL Metals</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Hex Chromium</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Total Cyanide</td> <td rowspan="10" style="writing-mode: vertical-rl; transform: rotate(180deg); text-align: center; font-weight: bold;">Total Bottle</td> </tr> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> <tr><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td></tr> <tr><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td></tr> <tr><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td></tr> <tr><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td></tr> <tr><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td></tr> <tr><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td></tr> <tr><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td></tr> <tr><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td><td>↓</td></tr> </table>		Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total Cyanide	Total Bottle	X	X	X	X	X	X	X	X	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
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-05	RB22_3-5	↓	1305	↓	JL																																																																																	
-06	RB19_0-2	↓	1400	↓	JL																																																																																	
-07	RB19_20-22	↓	1405	↓	JL																																																																																	
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																														
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[Signature] D. Santos		1/31/19 22:30		[Signature] D. Santos		1/31/19 22:30																																																																																



ANALYTICAL REPORT

Lab Number:	L1900707
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/14/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900707-01	RB13_0-2	SOIL	BRONX, NY	01/07/19 10:45	01/07/19
L1900707-02	RB13_18-20	SOIL	BRONX, NY	01/07/19 11:00	01/07/19
L1900707-03	RB13_22-24	SOIL	BRONX, NY	01/07/19 10:50	01/07/19
L1900707-04	RB13_33-35	SOIL	BRONX, NY	01/07/19 10:55	01/07/19
L1900707-05	RB14_0-2	SOIL	BRONX, NY	01/07/19 12:20	01/07/19
L1900707-06	RB14_18-20	SOIL	BRONX, NY	01/07/19 12:25	01/07/19
L1900707-07	RB14_23-25	SOIL	BRONX, NY	01/07/19 12:30	01/07/19
L1900707-08	RB14_33-35	SOIL	BRONX, NY	01/07/19 12:35	01/07/19
L1900707-09	SODUP04_010719	SOIL	BRONX, NY	01/07/19 00:00	01/07/19
L1900707-10	SOTB06_010719	WATER	BRONX, NY	01/07/19 00:00	01/07/19
L1900707-11	SOFB03_010719	WATER	BRONX, NY	01/07/19 14:00	01/07/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1900707-03, -06, -07, and -09: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1900707-03, -06, -07, and -09: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (146%, 149%, 131%, and 147%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Semivolatile Organics

L1900707-07: The sample has elevated detection limits due to the dilution required by the sample matrix.

The WG1195621-4/-5 MS/MSD recoveries, performed on L1900707-03, are below the acceptance criteria for nitrobenzene (MSD 39%), acetophenone (0%/0%), 2,4-dinitrophenol (0%/0%), 4,6-dinitro-o-cresol (0%/0%), and benzoic acid (0%/0%), due to the concentrations of these compounds falling below the reported detection limits.

The WG1195621-4/-5 MS/MSD recoveries, performed on L1900707-03, are outside the acceptance criteria for naphthalene (0%/0%) and 2-methylnaphthalene (0%/0%). The unacceptable percent recoveries are attributed to the elevated concentrations of target compounds present in the native sample.

Total Metals

L1900707-01 through -09: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1196431-3/-4 MS/MSD recoveries for aluminum (420%/1450%) and iron (559%/2840%), performed on L1900707-03, do not apply because the sample concentrations are greater than four times the spike amounts added. The MS/MSD RPDs for aluminum (39%) and iron (25%) are above the acceptance criteria.

The WG1196431-4 MSD recoveries, performed on L1900707-03, are outside the acceptance criteria for

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Case Narrative (continued)

magnesium (163%), manganese (151%), and potassium (126%). A post digestion spike was performed and was within acceptance criteria.

Cyanide, Total

The WG1195617-2/-3 LCS/LCSD recoveries (60%/62%), associated with L1900707-01 through -09, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Hexavalent Chromium

The WG1196593-6 Soluble MS recovery (73%) was below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 99%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/14/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 14:36
 Analyst: AD
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.14	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	0.77		ug/kg	0.58	0.23	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.19	1
Bromodichloromethane	ND		ug/kg	0.58	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	0.76		ug/kg	0.58	0.19	1
Toluene	0.80	J	ug/kg	1.2	0.63	1
Ethylbenzene	0.18	J	ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-01

Date Collected: 01/07/19 10:45

Client ID: RB13_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	0.88	J	ug/kg	2.3	0.65	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	0.88	J	ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	7.4	J	ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.19	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.6	0.75	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
Client ID: RB13_0-2
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.32	1
1,3,5-Trimethylbenzene	0.26	J	ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.39	1
1,4-Dioxane	ND		ug/kg	120	41.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	0.66	J	ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02 D
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 18:06
 Analyst: AD
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	2800	1300	10
1,1-Dichloroethane	ND		ug/kg	560	81.	10
Chloroform	ND		ug/kg	840	78.	10
Carbon tetrachloride	ND		ug/kg	560	130	10
1,2-Dichloropropane	ND		ug/kg	560	70.	10
Dibromochloromethane	ND		ug/kg	560	78.	10
1,1,2-Trichloroethane	ND		ug/kg	560	150	10
Tetrachloroethene	ND		ug/kg	280	110	10
Chlorobenzene	ND		ug/kg	280	71.	10
Trichlorofluoromethane	ND		ug/kg	2200	390	10
1,2-Dichloroethane	ND		ug/kg	560	140	10
1,1,1-Trichloroethane	ND		ug/kg	280	93.	10
Bromodichloromethane	ND		ug/kg	280	61.	10
trans-1,3-Dichloropropene	ND		ug/kg	560	150	10
cis-1,3-Dichloropropene	ND		ug/kg	280	88.	10
1,3-Dichloropropene, Total	ND		ug/kg	280	88.	10
1,1-Dichloropropene	ND		ug/kg	280	89.	10
Bromoform	ND		ug/kg	2200	140	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	280	93.	10
Benzene	1700		ug/kg	280	93.	10
Toluene	1600		ug/kg	560	300	10
Ethylbenzene	37000		ug/kg	560	79.	10
Chloromethane	ND		ug/kg	2200	520	10
Bromomethane	ND		ug/kg	1100	320	10
Vinyl chloride	ND		ug/kg	560	190	10
Chloroethane	ND		ug/kg	1100	250	10
1,1-Dichloroethene	ND		ug/kg	560	130	10
trans-1,2-Dichloroethene	ND		ug/kg	840	77.	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-02 D

Date Collected: 01/07/19 11:00

Client ID: RB13_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	280	77.	10
1,2-Dichlorobenzene	ND		ug/kg	1100	80.	10
1,3-Dichlorobenzene	ND		ug/kg	1100	83.	10
1,4-Dichlorobenzene	ND		ug/kg	1100	96.	10
Methyl tert butyl ether	ND		ug/kg	1100	110	10
p/m-Xylene	93000		ug/kg	1100	310	10
o-Xylene	24000		ug/kg	560	160	10
Xylenes, Total	120000		ug/kg	560	160	10
cis-1,2-Dichloroethene	ND		ug/kg	560	98.	10
1,2-Dichloroethene, Total	ND		ug/kg	560	77.	10
Dibromomethane	ND		ug/kg	1100	130	10
Styrene	ND		ug/kg	560	110	10
Dichlorodifluoromethane	ND		ug/kg	5600	510	10
Acetone	ND		ug/kg	5600	2700	10
Carbon disulfide	ND		ug/kg	5600	2500	10
2-Butanone	ND		ug/kg	5600	1200	10
Vinyl acetate	ND		ug/kg	5600	1200	10
4-Methyl-2-pentanone	ND		ug/kg	5600	720	10
1,2,3-Trichloropropane	ND		ug/kg	1100	71.	10
2-Hexanone	ND		ug/kg	5600	660	10
Bromochloromethane	ND		ug/kg	1100	110	10
2,2-Dichloropropane	ND		ug/kg	1100	110	10
1,2-Dibromoethane	ND		ug/kg	560	160	10
1,3-Dichloropropane	ND		ug/kg	1100	93.	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	280	74.	10
Bromobenzene	ND		ug/kg	1100	81.	10
n-Butylbenzene	5500		ug/kg	560	93.	10
sec-Butylbenzene	2000		ug/kg	560	82.	10
tert-Butylbenzene	200	J	ug/kg	1100	66.	10
o-Chlorotoluene	ND		ug/kg	1100	110	10
p-Chlorotoluene	ND		ug/kg	1100	60.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1700	560	10
Hexachlorobutadiene	160	J	ug/kg	2200	94.	10
Isopropylbenzene	7100		ug/kg	560	61.	10
p-Isopropyltoluene	2000		ug/kg	560	61.	10
Naphthalene	12000		ug/kg	2200	360	10
Acrylonitrile	ND		ug/kg	2200	640	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02 D
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	18000		ug/kg	560	96.	10
1,2,3-Trichlorobenzene	ND		ug/kg	1100	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1100	150	10
1,3,5-Trimethylbenzene	38000		ug/kg	1100	110	10
1,2,4-Trimethylbenzene	110000		ug/kg	1100	190	10
1,4-Dioxane	ND		ug/kg	56000	20000	10
p-Diethylbenzene	3200		ug/kg	1100	99.	10
p-Ethyltoluene	75000		ug/kg	1100	210	10
1,2,4,5-Tetramethylbenzene	12000		ug/kg	1100	110	10
Ethyl ether	ND		ug/kg	1100	190	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	2800	790	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	126		70-130
Dibromofluoromethane	84		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03 D
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 16:21
 Analyst: AD
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	1500	690	5
1,1-Dichloroethane	ND		ug/kg	300	44.	5
Chloroform	ND		ug/kg	450	42.	5
Carbon tetrachloride	ND		ug/kg	300	70.	5
1,2-Dichloropropane	ND		ug/kg	300	38.	5
Dibromochloromethane	ND		ug/kg	300	42.	5
1,1,2-Trichloroethane	ND		ug/kg	300	81.	5
Tetrachloroethene	ND		ug/kg	150	59.	5
Chlorobenzene	ND		ug/kg	150	38.	5
Trichlorofluoromethane	ND		ug/kg	1200	210	5
1,2-Dichloroethane	ND		ug/kg	300	78.	5
1,1,1-Trichloroethane	ND		ug/kg	150	50.	5
Bromodichloromethane	ND		ug/kg	150	33.	5
trans-1,3-Dichloropropene	ND		ug/kg	300	82.	5
cis-1,3-Dichloropropene	ND		ug/kg	150	48.	5
1,3-Dichloropropene, Total	ND		ug/kg	150	48.	5
1,1-Dichloropropene	ND		ug/kg	150	48.	5
Bromoform	ND		ug/kg	1200	74.	5
1,1,2,2-Tetrachloroethane	ND		ug/kg	150	50.	5
Benzene	1400		ug/kg	150	50.	5
Toluene	490		ug/kg	300	160	5
Ethylbenzene	9700		ug/kg	300	43.	5
Chloromethane	ND		ug/kg	1200	280	5
Bromomethane	ND		ug/kg	600	180	5
Vinyl chloride	ND		ug/kg	300	100	5
Chloroethane	ND		ug/kg	600	140	5
1,1-Dichloroethene	ND		ug/kg	300	72.	5
trans-1,2-Dichloroethene	ND		ug/kg	450	41.	5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-03 D

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	150	41.	5
1,2-Dichlorobenzene	ND		ug/kg	600	44.	5
1,3-Dichlorobenzene	ND		ug/kg	600	45.	5
1,4-Dichlorobenzene	ND		ug/kg	600	52.	5
Methyl tert butyl ether	ND		ug/kg	600	61.	5
p/m-Xylene	4000		ug/kg	600	170	5
o-Xylene	1200		ug/kg	300	88.	5
Xylenes, Total	5200		ug/kg	300	88.	5
cis-1,2-Dichloroethene	ND		ug/kg	300	53.	5
1,2-Dichloroethene, Total	ND		ug/kg	300	41.	5
Dibromomethane	ND		ug/kg	600	72.	5
Styrene	ND		ug/kg	300	59.	5
Dichlorodifluoromethane	ND		ug/kg	3000	280	5
Acetone	ND		ug/kg	3000	1400	5
Carbon disulfide	ND		ug/kg	3000	1400	5
2-Butanone	ND		ug/kg	3000	670	5
Vinyl acetate	ND		ug/kg	3000	650	5
4-Methyl-2-pentanone	ND		ug/kg	3000	390	5
1,2,3-Trichloropropane	ND		ug/kg	600	38.	5
2-Hexanone	ND		ug/kg	3000	360	5
Bromochloromethane	ND		ug/kg	600	62.	5
2,2-Dichloropropane	ND		ug/kg	600	61.	5
1,2-Dibromoethane	ND		ug/kg	300	84.	5
1,3-Dichloropropane	ND		ug/kg	600	50.	5
1,1,1,2-Tetrachloroethane	ND		ug/kg	150	40.	5
Bromobenzene	ND		ug/kg	600	44.	5
n-Butylbenzene	11000		ug/kg	300	50.	5
sec-Butylbenzene	2900		ug/kg	300	44.	5
tert-Butylbenzene	280	J	ug/kg	600	36.	5
o-Chlorotoluene	ND		ug/kg	600	58.	5
p-Chlorotoluene	ND		ug/kg	600	33.	5
1,2-Dibromo-3-chloropropane	ND		ug/kg	910	300	5
Hexachlorobutadiene	ND		ug/kg	1200	51.	5
Isopropylbenzene	12000		ug/kg	300	33.	5
p-Isopropyltoluene	2300		ug/kg	300	33.	5
Naphthalene	25000		ug/kg	1200	200	5
Acrylonitrile	ND		ug/kg	1200	350	5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-03 D

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	30000		ug/kg	300	52.	5
1,2,3-Trichlorobenzene	ND		ug/kg	600	97.	5
1,2,4-Trichlorobenzene	ND		ug/kg	600	82.	5
1,3,5-Trimethylbenzene	6700		ug/kg	600	58.	5
1,2,4-Trimethylbenzene	300	J	ug/kg	600	100	5
1,4-Dioxane	ND		ug/kg	30000	11000	5
p-Diethylbenzene	5800		ug/kg	600	53.	5
p-Ethyltoluene	6400		ug/kg	600	120	5
1,2,4,5-Tetramethylbenzene	20000		ug/kg	600	58.	5
Ethyl ether	ND		ug/kg	600	100	5
trans-1,4-Dichloro-2-butene	ND		ug/kg	1500	430	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	146	Q	70-130
Dibromofluoromethane	77		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 15:03
 Analyst: AD
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.0	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.24	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.84	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.60	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	0.21	J	ug/kg	0.60	0.20	1
Toluene	ND		ug/kg	1.2	0.66	1
Ethylbenzene	0.97	J	ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.70	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.54	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-04

Date Collected: 01/07/19 10:55

Client ID: RB13_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.68	1
o-Xylene	ND		ug/kg	1.2	0.35	1
Xylenes, Total	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.8	1
Carbon disulfide	ND		ug/kg	12	5.5	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.60	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	0.55	J	ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	0.56	J	ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	1.2	J	ug/kg	4.8	0.78	1
Acrylonitrile	ND		ug/kg	4.8	1.4	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	1.1	J	ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	0.70	J	ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.40	1
1,4-Dioxane	ND		ug/kg	120	42.	1
p-Diethylbenzene	1.6	J	ug/kg	2.4	0.21	1
p-Ethyltoluene	0.54	J	ug/kg	2.4	0.46	1
1,2,4,5-Tetramethylbenzene	0.86	J	ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.41	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	78		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 15:29
 Analyst: AD
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.9	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	0.62		ug/kg	0.59	0.23	1
Chlorobenzene	ND		ug/kg	0.59	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.82	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.59	0.20	1
Bromodichloromethane	ND		ug/kg	0.59	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.59	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.59	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.59	0.19	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.59	0.20	1
Benzene	0.59		ug/kg	0.59	0.20	1
Toluene	0.82	J	ug/kg	1.2	0.64	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.4	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-05

Date Collected: 01/07/19 12:20

Client ID: RB14_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.59	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.66	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.7	1
Carbon disulfide	ND		ug/kg	12	5.4	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.59	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.22	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.7	0.77	1
Acrylonitrile	ND		ug/kg	4.7	1.4	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
Client ID: RB14_0-2
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.39	1
1,4-Dioxane	ND		ug/kg	120	41.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.45	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.22	1
Ethyl ether	ND		ug/kg	2.4	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	90		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06 D
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 13:18
 Analyst: AD
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	750	340	2.5
1,1-Dichloroethane	ND		ug/kg	150	22.	2.5
Chloroform	ND		ug/kg	220	21.	2.5
Carbon tetrachloride	ND		ug/kg	150	34.	2.5
1,2-Dichloropropane	ND		ug/kg	150	19.	2.5
Dibromochloromethane	ND		ug/kg	150	21.	2.5
1,1,2-Trichloroethane	ND		ug/kg	150	40.	2.5
Tetrachloroethene	ND		ug/kg	75	29.	2.5
Chlorobenzene	ND		ug/kg	75	19.	2.5
Trichlorofluoromethane	ND		ug/kg	600	100	2.5
1,2-Dichloroethane	ND		ug/kg	150	38.	2.5
1,1,1-Trichloroethane	ND		ug/kg	75	25.	2.5
Bromodichloromethane	ND		ug/kg	75	16.	2.5
trans-1,3-Dichloropropene	ND		ug/kg	150	41.	2.5
cis-1,3-Dichloropropene	ND		ug/kg	75	24.	2.5
1,3-Dichloropropene, Total	ND		ug/kg	75	24.	2.5
1,1-Dichloropropene	ND		ug/kg	75	24.	2.5
Bromoform	ND		ug/kg	600	37.	2.5
1,1,2,2-Tetrachloroethane	ND		ug/kg	75	25.	2.5
Benzene	ND		ug/kg	75	25.	2.5
Toluene	ND		ug/kg	150	81.	2.5
Ethylbenzene	320		ug/kg	150	21.	2.5
Chloromethane	ND		ug/kg	600	140	2.5
Bromomethane	ND		ug/kg	300	87.	2.5
Vinyl chloride	ND		ug/kg	150	50.	2.5
Chloroethane	ND		ug/kg	300	68.	2.5
1,1-Dichloroethene	ND		ug/kg	150	36.	2.5
trans-1,2-Dichloroethene	ND		ug/kg	220	20.	2.5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-06 D

Date Collected: 01/07/19 12:25

Client ID: RB14_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	75	20.	2.5
1,2-Dichlorobenzene	ND		ug/kg	300	22.	2.5
1,3-Dichlorobenzene	ND		ug/kg	300	22.	2.5
1,4-Dichlorobenzene	ND		ug/kg	300	26.	2.5
Methyl tert butyl ether	ND		ug/kg	300	30.	2.5
p/m-Xylene	ND		ug/kg	300	84.	2.5
o-Xylene	ND		ug/kg	150	43.	2.5
Xylenes, Total	ND		ug/kg	150	43.	2.5
cis-1,2-Dichloroethene	ND		ug/kg	150	26.	2.5
1,2-Dichloroethene, Total	ND		ug/kg	150	20.	2.5
Dibromomethane	ND		ug/kg	300	36.	2.5
Styrene	ND		ug/kg	150	29.	2.5
Dichlorodifluoromethane	ND		ug/kg	1500	140	2.5
Acetone	ND		ug/kg	1500	720	2.5
Carbon disulfide	ND		ug/kg	1500	680	2.5
2-Butanone	ND		ug/kg	1500	330	2.5
Vinyl acetate	ND		ug/kg	1500	320	2.5
4-Methyl-2-pentanone	ND		ug/kg	1500	190	2.5
1,2,3-Trichloropropane	ND		ug/kg	300	19.	2.5
2-Hexanone	ND		ug/kg	1500	180	2.5
Bromochloromethane	ND		ug/kg	300	31.	2.5
2,2-Dichloropropane	ND		ug/kg	300	30.	2.5
1,2-Dibromoethane	ND		ug/kg	150	42.	2.5
1,3-Dichloropropane	ND		ug/kg	300	25.	2.5
1,1,1,2-Tetrachloroethane	ND		ug/kg	75	20.	2.5
Bromobenzene	ND		ug/kg	300	22.	2.5
n-Butylbenzene	3200		ug/kg	150	25.	2.5
sec-Butylbenzene	1200		ug/kg	150	22.	2.5
tert-Butylbenzene	110	J	ug/kg	300	18.	2.5
o-Chlorotoluene	ND		ug/kg	300	28.	2.5
p-Chlorotoluene	ND		ug/kg	300	16.	2.5
1,2-Dibromo-3-chloropropane	ND		ug/kg	450	150	2.5
Hexachlorobutadiene	ND		ug/kg	600	25.	2.5
Isopropylbenzene	2400		ug/kg	150	16.	2.5
p-Isopropyltoluene	580		ug/kg	150	16.	2.5
Naphthalene	480	J	ug/kg	600	97.	2.5
Acrylonitrile	ND		ug/kg	600	170	2.5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06 D
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	7600		ug/kg	150	26.	2.5
1,2,3-Trichlorobenzene	ND		ug/kg	300	48.	2.5
1,2,4-Trichlorobenzene	ND		ug/kg	300	41.	2.5
1,3,5-Trimethylbenzene	200	J	ug/kg	300	29.	2.5
1,2,4-Trimethylbenzene	59	J	ug/kg	300	50.	2.5
1,4-Dioxane	ND		ug/kg	15000	5200	2.5
p-Diethylbenzene	2600		ug/kg	300	26.	2.5
p-Ethyltoluene	150	J	ug/kg	300	57.	2.5
1,2,4,5-Tetramethylbenzene	9700		ug/kg	300	28.	2.5
Ethyl ether	ND		ug/kg	300	51.	2.5
trans-1,4-Dichloro-2-butene	ND		ug/kg	750	210	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	149	Q	70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 13:44
 Analyst: AD
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	3100	1400	10
1,1-Dichloroethane	ND		ug/kg	620	90.	10
Chloroform	ND		ug/kg	930	87.	10
Carbon tetrachloride	ND		ug/kg	620	140	10
1,2-Dichloropropane	ND		ug/kg	620	78.	10
Dibromochloromethane	ND		ug/kg	620	87.	10
1,1,2-Trichloroethane	ND		ug/kg	620	160	10
Tetrachloroethene	ND		ug/kg	310	120	10
Chlorobenzene	ND		ug/kg	310	79.	10
Trichlorofluoromethane	ND		ug/kg	2500	430	10
1,2-Dichloroethane	ND		ug/kg	620	160	10
1,1,1-Trichloroethane	ND		ug/kg	310	100	10
Bromodichloromethane	ND		ug/kg	310	68.	10
trans-1,3-Dichloropropene	ND		ug/kg	620	170	10
cis-1,3-Dichloropropene	ND		ug/kg	310	98.	10
1,3-Dichloropropene, Total	ND		ug/kg	310	98.	10
1,1-Dichloropropene	ND		ug/kg	310	99.	10
Bromoform	ND		ug/kg	2500	150	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	310	100	10
Benzene	ND		ug/kg	310	100	10
Toluene	ND		ug/kg	620	340	10
Ethylbenzene	2300		ug/kg	620	88.	10
Chloromethane	ND		ug/kg	2500	580	10
Bromomethane	ND		ug/kg	1200	360	10
Vinyl chloride	ND		ug/kg	620	210	10
Chloroethane	ND		ug/kg	1200	280	10
1,1-Dichloroethene	ND		ug/kg	620	150	10
trans-1,2-Dichloroethene	ND		ug/kg	930	85.	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-07 D

Date Collected: 01/07/19 12:30

Client ID: RB14_23-25

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	310	85.	10
1,2-Dichlorobenzene	ND		ug/kg	1200	89.	10
1,3-Dichlorobenzene	ND		ug/kg	1200	92.	10
1,4-Dichlorobenzene	ND		ug/kg	1200	110	10
Methyl tert butyl ether	ND		ug/kg	1200	120	10
p/m-Xylene	420	J	ug/kg	1200	350	10
o-Xylene	ND		ug/kg	620	180	10
Xylenes, Total	420	J	ug/kg	620	180	10
cis-1,2-Dichloroethene	ND		ug/kg	620	110	10
1,2-Dichloroethene, Total	ND		ug/kg	620	85.	10
Dibromomethane	ND		ug/kg	1200	150	10
Styrene	ND		ug/kg	620	120	10
Dichlorodifluoromethane	ND		ug/kg	6200	570	10
Acetone	ND		ug/kg	6200	3000	10
Carbon disulfide	ND		ug/kg	6200	2800	10
2-Butanone	ND		ug/kg	6200	1400	10
Vinyl acetate	ND		ug/kg	6200	1300	10
4-Methyl-2-pentanone	ND		ug/kg	6200	790	10
1,2,3-Trichloropropane	1200		ug/kg	1200	79.	10
2-Hexanone	ND		ug/kg	6200	730	10
Bromochloromethane	ND		ug/kg	1200	130	10
2,2-Dichloropropane	ND		ug/kg	1200	120	10
1,2-Dibromoethane	ND		ug/kg	620	170	10
1,3-Dichloropropane	ND		ug/kg	1200	100	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	310	82.	10
Bromobenzene	ND		ug/kg	1200	90.	10
n-Butylbenzene	17000		ug/kg	620	100	10
sec-Butylbenzene	4000		ug/kg	620	91.	10
tert-Butylbenzene	360	J	ug/kg	1200	73.	10
o-Chlorotoluene	ND		ug/kg	1200	120	10
p-Chlorotoluene	ND		ug/kg	1200	67.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1900	620	10
Hexachlorobutadiene	ND		ug/kg	2500	100	10
Isopropylbenzene	12000		ug/kg	620	68.	10
p-Isopropyltoluene	2600		ug/kg	620	68.	10
Naphthalene	6300		ug/kg	2500	400	10
Acrylonitrile	ND		ug/kg	2500	710	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatle Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	33000		ug/kg	620	110	10
1,2,3-Trichlorobenzene	ND		ug/kg	1200	200	10
1,2,4-Trichlorobenzene	ND		ug/kg	1200	170	10
1,3,5-Trimethylbenzene	23000		ug/kg	1200	120	10
1,2,4-Trimethylbenzene	520	J	ug/kg	1200	210	10
1,4-Dioxane	ND		ug/kg	62000	22000	10
p-Diethylbenzene	7900		ug/kg	1200	110	10
p-Ethyltoluene	2500		ug/kg	1200	240	10
1,2,4,5-Tetramethylbenzene	27000		ug/kg	1200	120	10
Ethyl ether	ND		ug/kg	1200	210	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	3100	880	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	131	Q	70-130
Dibromofluoromethane	90		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 15:55
 Analyst: AD
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.4	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.89	0.13	1
Chloroform	ND		ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.89	0.20	1
1,2-Dichloropropane	ND		ug/kg	0.89	0.11	1
Dibromochloromethane	ND		ug/kg	0.89	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.89	0.24	1
Tetrachloroethene	ND		ug/kg	0.44	0.17	1
Chlorobenzene	ND		ug/kg	0.44	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.62	1
1,2-Dichloroethane	ND		ug/kg	0.89	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.44	0.15	1
Bromodichloromethane	ND		ug/kg	0.44	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.89	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.44	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.44	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.44	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.44	0.15	1
Benzene	ND		ug/kg	0.44	0.15	1
Toluene	ND		ug/kg	0.89	0.48	1
Ethylbenzene	0.17	J	ug/kg	0.89	0.12	1
Chloromethane	ND		ug/kg	3.6	0.83	1
Bromomethane	ND		ug/kg	1.8	0.52	1
Vinyl chloride	ND		ug/kg	0.89	0.30	1
Chloroethane	ND		ug/kg	1.8	0.40	1
1,1-Dichloroethene	ND		ug/kg	0.89	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-08

Date Collected: 01/07/19 12:35

Client ID: RB14_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.44	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.50	1
o-Xylene	ND		ug/kg	0.89	0.26	1
Xylenes, Total	ND		ug/kg	0.89	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.89	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.89	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.21	1
Styrene	ND		ug/kg	0.89	0.17	1
Dichlorodifluoromethane	ND		ug/kg	8.9	0.82	1
Acetone	11		ug/kg	8.9	4.3	1
Carbon disulfide	ND		ug/kg	8.9	4.0	1
2-Butanone	ND		ug/kg	8.9	2.0	1
Vinyl acetate	ND		ug/kg	8.9	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	8.9	1.1	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.11	1
2-Hexanone	ND		ug/kg	8.9	1.0	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.89	0.25	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.44	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.89	0.15	1
sec-Butylbenzene	ND		ug/kg	0.89	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.10	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.89	1
Hexachlorobutadiene	ND		ug/kg	3.6	0.15	1
Isopropylbenzene	ND		ug/kg	0.89	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.89	0.10	1
Naphthalene	0.74	J	ug/kg	3.6	0.58	1
Acrylonitrile	ND		ug/kg	3.6	1.0	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
Client ID: RB14_33-35
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.89	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1
1,4-Dioxane	ND		ug/kg	89	31.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.34	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.4	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09 D
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 14:10
 Analyst: AD
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	1200	540	4
1,1-Dichloroethane	ND		ug/kg	240	34.	4
Chloroform	ND		ug/kg	350	33.	4
Carbon tetrachloride	ND		ug/kg	240	54.	4
1,2-Dichloropropane	ND		ug/kg	240	30.	4
Dibromochloromethane	ND		ug/kg	240	33.	4
1,1,2-Trichloroethane	ND		ug/kg	240	63.	4
Tetrachloroethene	ND		ug/kg	120	46.	4
Chlorobenzene	ND		ug/kg	120	30.	4
Trichlorofluoromethane	ND		ug/kg	950	160	4
1,2-Dichloroethane	ND		ug/kg	240	61.	4
1,1,1-Trichloroethane	ND		ug/kg	120	40.	4
Bromodichloromethane	ND		ug/kg	120	26.	4
trans-1,3-Dichloropropene	ND		ug/kg	240	64.	4
cis-1,3-Dichloropropene	ND		ug/kg	120	37.	4
1,3-Dichloropropene, Total	ND		ug/kg	120	37.	4
1,1-Dichloropropene	ND		ug/kg	120	38.	4
Bromoform	ND		ug/kg	950	58.	4
1,1,2,2-Tetrachloroethane	ND		ug/kg	120	39.	4
Benzene	ND		ug/kg	120	39.	4
Toluene	ND		ug/kg	240	130	4
Ethylbenzene	620		ug/kg	240	33.	4
Chloromethane	ND		ug/kg	950	220	4
Bromomethane	ND		ug/kg	470	140	4
Vinyl chloride	ND		ug/kg	240	79.	4
Chloroethane	ND		ug/kg	470	110	4
1,1-Dichloroethene	ND		ug/kg	240	56.	4
trans-1,2-Dichloroethene	ND		ug/kg	350	32.	4

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-09 D

Date Collected: 01/07/19 00:00

Client ID: SODUP04_010719

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	120	32.	4
1,2-Dichlorobenzene	ND		ug/kg	470	34.	4
1,3-Dichlorobenzene	ND		ug/kg	470	35.	4
1,4-Dichlorobenzene	ND		ug/kg	470	40.	4
Methyl tert butyl ether	ND		ug/kg	470	48.	4
p/m-Xylene	ND		ug/kg	470	130	4
o-Xylene	ND		ug/kg	240	69.	4
Xylenes, Total	ND		ug/kg	240	69.	4
cis-1,2-Dichloroethene	ND		ug/kg	240	41.	4
1,2-Dichloroethene, Total	ND		ug/kg	240	32.	4
Dibromomethane	ND		ug/kg	470	56.	4
Styrene	ND		ug/kg	240	46.	4
Dichlorodifluoromethane	ND		ug/kg	2400	220	4
Acetone	ND		ug/kg	2400	1100	4
Carbon disulfide	ND		ug/kg	2400	1100	4
2-Butanone	ND		ug/kg	2400	520	4
Vinyl acetate	ND		ug/kg	2400	510	4
4-Methyl-2-pentanone	ND		ug/kg	2400	300	4
1,2,3-Trichloropropane	ND		ug/kg	470	30.	4
2-Hexanone	ND		ug/kg	2400	280	4
Bromochloromethane	ND		ug/kg	470	48.	4
2,2-Dichloropropane	ND		ug/kg	470	48.	4
1,2-Dibromoethane	ND		ug/kg	240	66.	4
1,3-Dichloropropane	ND		ug/kg	470	40.	4
1,1,1,2-Tetrachloroethane	ND		ug/kg	120	31.	4
Bromobenzene	ND		ug/kg	470	34.	4
n-Butylbenzene	6100		ug/kg	240	40.	4
sec-Butylbenzene	1700		ug/kg	240	34.	4
tert-Butylbenzene	150	J	ug/kg	470	28.	4
o-Chlorotoluene	ND		ug/kg	470	45.	4
p-Chlorotoluene	ND		ug/kg	470	26.	4
1,2-Dibromo-3-chloropropane	ND		ug/kg	710	240	4
Hexachlorobutadiene	ND		ug/kg	950	40.	4
Isopropylbenzene	4600		ug/kg	240	26.	4
p-Isopropyltoluene	1100		ug/kg	240	26.	4
Naphthalene	1800		ug/kg	950	150	4
Acrylonitrile	ND		ug/kg	950	270	4

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09 D
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	13000		ug/kg	240	40.	4
1,2,3-Trichlorobenzene	ND		ug/kg	470	76.	4
1,2,4-Trichlorobenzene	ND		ug/kg	470	64.	4
1,3,5-Trimethylbenzene	4800		ug/kg	470	46.	4
1,2,4-Trimethylbenzene	ND		ug/kg	470	79.	4
1,4-Dioxane	ND		ug/kg	24000	8300	4
p-Diethylbenzene	3300		ug/kg	470	42.	4
p-Ethyltoluene	570		ug/kg	470	91.	4
1,2,4,5-Tetramethylbenzene	12000		ug/kg	470	45.	4
Ethyl ether	ND		ug/kg	470	81.	4
trans-1,4-Dichloro-2-butene	ND		ug/kg	1200	340	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	147	Q	70-130
Dibromofluoromethane	87		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-10
 Client ID: SOTB06_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/08/19 15:00
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-10
 Client ID: SOTB06_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-10
 Client ID: SOTB06_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/08/19 15:29
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-11

Date Collected: 01/07/19 14:00

Client ID: SOFB03_010719

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/08/19 08:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1195753-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/08/19 08:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1195753-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/08/19 08:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1195753-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/10/19 08:30
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,04-05,08 Batch: WG1196396-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.91	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/10/19 08:30
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,04-05,08 Batch: WG1196396-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19



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**Method Blank Analysis
Batch Quality Control**

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Analytical Date: 01/10/19 08:30
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,04-05,08 Batch: WG1196396-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	94		70-130



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Analytical Method: 1,8260C
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Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02-03,06-07,09 Batch: WG1196507-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	46	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8



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Analytical Method: 1,8260C
Analytical Date: 01/10/19 08:30
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02-03,06-07,09 Batch: WG1196507-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6



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Analytical Method: 1,8260C
Analytical Date: 01/10/19 08:30
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02-03,06-07,09 Batch: WG1196507-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	94		70-130



Lab Control Sample Analysis

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1195753-3 WG1195753-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	86		84		63-132	2		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	100		110		63-130	10		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	90		90		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	80		78		62-150	3		20
1,2-Dichloroethane	110		100		70-130	10		20
1,1,1-Trichloroethane	93		91		67-130	2		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	92		91		70-130	1		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	87		85		64-130	2		20
Bromomethane	54		53		39-139	2		20

Lab Control Sample Analysis

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Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1195753-3 WG1195753-4								
Vinyl chloride	87		86		55-140	1		20
Chloroethane	96		94		55-138	2		20
1,1-Dichloroethene	90		87		61-145	3		20
trans-1,2-Dichloroethene	98		97		70-130	1		20
Trichloroethene	97		97		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	110		110		64-130	0		20
Acrylonitrile	100		100		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	72		69		36-147	4		20
Acetone	120		120		58-148	0		20
Carbon disulfide	91		89		51-130	2		20
2-Butanone	85		74		63-138	14		20
Vinyl acetate	120		120		70-130	0		20
4-Methyl-2-pentanone	100		100		59-130	0		20
2-Hexanone	100		100		57-130	0		20

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Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1195753-3 WG1195753-4								
Bromochloromethane	110		100		70-130	10		20
2,2-Dichloropropane	98		96		63-133	2		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	110		100		70-130	10		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	100		96		53-136	4		20
sec-Butylbenzene	97		95		70-130	2		20
tert-Butylbenzene	100		98		70-130	2		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	87		84		41-144	4		20
Hexachlorobutadiene	96		90		63-130	6		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		99		70-130	1		20
Naphthalene	80		80		70-130	0		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	78		79		70-130	1		20
1,2,4-Trichlorobenzene	90		89		70-130	1		20
1,3,5-Trimethylbenzene	110		100		64-130	10		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
1,4-Dioxane	100		86		56-162	15		20
p-Diethylbenzene	100		98		70-130	2		20

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Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1195753-3 WG1195753-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	110		100		59-134	10		20
trans-1,4-Dichloro-2-butene	92		94		70-130	2		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	101		101		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	105		104		70-130
Dibromofluoromethane	96		96		70-130

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Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,04-05,08 Batch: WG1196396-3 WG1196396-4								
Methylene chloride	94		100		70-130	6		30
1,1-Dichloroethane	98		110		70-130	12		30
Chloroform	98		97		70-130	1		30
Carbon tetrachloride	89		94		70-130	5		30
1,2-Dichloropropane	95		114		70-130	18		30
Dibromochloromethane	97		105		70-130	8		30
1,1,2-Trichloroethane	104		109		70-130	5		30
Tetrachloroethene	95		105		70-130	10		30
Chlorobenzene	102		107		70-130	5		30
Trichlorofluoromethane	89		95		70-139	7		30
1,2-Dichloroethane	78		78		70-130	0		30
1,1,1-Trichloroethane	90		92		70-130	2		30
Bromodichloromethane	88		104		70-130	17		30
trans-1,3-Dichloropropene	96		102		70-130	6		30
cis-1,3-Dichloropropene	94		106		70-130	12		30
1,1-Dichloropropene	96		100		70-130	4		30
Bromoform	101		103		70-130	2		30
1,1,2,2-Tetrachloroethane	115		108		70-130	6		30
Benzene	98		105		70-130	7		30
Toluene	100		107		70-130	7		30
Ethylbenzene	100		106		70-130	6		30
Chloromethane	104		107		52-130	3		30
Bromomethane	119		122		57-147	2		30

Lab Control Sample Analysis

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Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,04-05,08 Batch: WG1196396-3 WG1196396-4								
Vinyl chloride	109		118		67-130	8		30
Chloroethane	111		114		50-151	3		30
1,1-Dichloroethene	100		107		65-135	7		30
trans-1,2-Dichloroethene	100		106		70-130	6		30
Trichloroethene	95		100		70-130	5		30
1,2-Dichlorobenzene	102		108		70-130	6		30
1,3-Dichlorobenzene	105		108		70-130	3		30
1,4-Dichlorobenzene	101		108		70-130	7		30
Methyl tert butyl ether	92		94		66-130	2		30
p/m-Xylene	104		106		70-130	2		30
o-Xylene	105		104		70-130	1		30
cis-1,2-Dichloroethene	105		108		70-130	3		30
Dibromomethane	90		102		70-130	13		30
Styrene	106		105		70-130	1		30
Dichlorodifluoromethane	89		97		30-146	9		30
Acetone	94		96		54-140	2		30
Carbon disulfide	96		102		59-130	6		30
2-Butanone	107		96		70-130	11		30
Vinyl acetate	96		108		70-130	12		30
4-Methyl-2-pentanone	98		101		70-130	3		30
1,2,3-Trichloropropane	103		103		68-130	0		30
2-Hexanone	95		96		70-130	1		30
Bromochloromethane	106		106		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,04-05,08 Batch: WG1196396-3 WG1196396-4								
2,2-Dichloropropane	99		99		70-130	0		30
1,2-Dibromoethane	105		109		70-130	4		30
1,3-Dichloropropane	100		111		69-130	10		30
1,1,1,2-Tetrachloroethane	97		102		70-130	5		30
Bromobenzene	105		110		70-130	5		30
n-Butylbenzene	104		108		70-130	4		30
sec-Butylbenzene	106		112		70-130	6		30
tert-Butylbenzene	106		112		70-130	6		30
o-Chlorotoluene	102		105		70-130	3		30
p-Chlorotoluene	103		106		70-130	3		30
1,2-Dibromo-3-chloropropane	97		104		68-130	7		30
Hexachlorobutadiene	95		105		67-130	10		30
Isopropylbenzene	109		113		70-130	4		30
p-Isopropyltoluene	105		111		70-130	6		30
Naphthalene	104		110		70-130	6		30
Acrylonitrile	101		109		70-130	8		30
n-Propylbenzene	104		110		70-130	6		30
1,2,3-Trichlorobenzene	101		110		70-130	9		30
1,2,4-Trichlorobenzene	104		109		70-130	5		30
1,3,5-Trimethylbenzene	104		110		70-130	6		30
1,2,4-Trimethylbenzene	106		110		70-130	4		30
1,4-Dioxane	86		93		65-136	8		30
p-Diethylbenzene	108		113		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,04-05,08 Batch: WG1196396-3 WG1196396-4								
p-Ethyltoluene	109		112		70-130	3		30
1,2,4,5-Tetramethylbenzene	103		108		70-130	5		30
Ethyl ether	103		102		67-130	1		30
trans-1,4-Dichloro-2-butene	98		93		70-130	5		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	78		79		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	103		102		70-130
Dibromofluoromethane	95		94		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 Batch: WG1196507-3 WG1196507-4								
Methylene chloride	94		100		70-130	6		30
1,1-Dichloroethane	98		110		70-130	12		30
Chloroform	98		97		70-130	1		30
Carbon tetrachloride	89		94		70-130	5		30
1,2-Dichloropropane	95		114		70-130	18		30
Dibromochloromethane	97		105		70-130	8		30
1,1,2-Trichloroethane	104		109		70-130	5		30
Tetrachloroethene	95		105		70-130	10		30
Chlorobenzene	102		107		70-130	5		30
Trichlorofluoromethane	89		95		70-139	7		30
1,2-Dichloroethane	78		78		70-130	0		30
1,1,1-Trichloroethane	90		92		70-130	2		30
Bromodichloromethane	88		104		70-130	17		30
trans-1,3-Dichloropropene	96		102		70-130	6		30
cis-1,3-Dichloropropene	94		106		70-130	12		30
1,1-Dichloropropene	96		100		70-130	4		30
Bromoform	101		103		70-130	2		30
1,1,2,2-Tetrachloroethane	115		108		70-130	6		30
Benzene	98		105		70-130	7		30
Toluene	100		107		70-130	7		30
Ethylbenzene	100		106		70-130	6		30
Chloromethane	104		107		52-130	3		30
Bromomethane	119		122		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 Batch: WG1196507-3 WG1196507-4									
Vinyl chloride	109		118		67-130		8		30
Chloroethane	111		114		50-151		3		30
1,1-Dichloroethene	100		107		65-135		7		30
trans-1,2-Dichloroethene	100		106		70-130		6		30
Trichloroethene	95		100		70-130		5		30
1,2-Dichlorobenzene	102		108		70-130		6		30
1,3-Dichlorobenzene	105		108		70-130		3		30
1,4-Dichlorobenzene	101		108		70-130		7		30
Methyl tert butyl ether	92		94		66-130		2		30
p/m-Xylene	104		106		70-130		2		30
o-Xylene	105		104		70-130		1		30
cis-1,2-Dichloroethene	105		108		70-130		3		30
Dibromomethane	90		102		70-130		13		30
Styrene	106		105		70-130		1		30
Dichlorodifluoromethane	89		97		30-146		9		30
Acetone	94		96		54-140		2		30
Carbon disulfide	96		102		59-130		6		30
2-Butanone	107		96		70-130		11		30
Vinyl acetate	96		108		70-130		12		30
4-Methyl-2-pentanone	98		101		70-130		3		30
1,2,3-Trichloropropane	103		103		68-130		0		30
2-Hexanone	95		96		70-130		1		30
Bromochloromethane	106		106		70-130		0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 Batch: WG1196507-3 WG1196507-4								
2,2-Dichloropropane	99		99		70-130	0		30
1,2-Dibromoethane	105		109		70-130	4		30
1,3-Dichloropropane	100		111		69-130	10		30
1,1,1,2-Tetrachloroethane	97		102		70-130	5		30
Bromobenzene	105		110		70-130	5		30
n-Butylbenzene	104		108		70-130	4		30
sec-Butylbenzene	106		112		70-130	6		30
tert-Butylbenzene	106		112		70-130	6		30
o-Chlorotoluene	102		105		70-130	3		30
p-Chlorotoluene	103		106		70-130	3		30
1,2-Dibromo-3-chloropropane	97		104		68-130	7		30
Hexachlorobutadiene	95		105		67-130	10		30
Isopropylbenzene	109		113		70-130	4		30
p-Isopropyltoluene	105		111		70-130	6		30
Naphthalene	104		110		70-130	6		30
Acrylonitrile	101		109		70-130	8		30
n-Propylbenzene	104		110		70-130	6		30
1,2,3-Trichlorobenzene	101		110		70-130	9		30
1,2,4-Trichlorobenzene	104		109		70-130	5		30
1,3,5-Trimethylbenzene	104		110		70-130	6		30
1,2,4-Trimethylbenzene	106		110		70-130	4		30
1,4-Dioxane	86		93		65-136	8		30
p-Diethylbenzene	108		113		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 Batch: WG1196507-3 WG1196507-4								
p-Ethyltoluene	109		112		70-130	3		30
1,2,4,5-Tetramethylbenzene	103		108		70-130	5		30
Ethyl ether	103		102		67-130	1		30
trans-1,4-Dichloro-2-butene	98		93		70-130	5		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	78		79		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	103		102		70-130
Dibromofluoromethane	95		94		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 QC Batch ID: WG1196507-6 WG1196507-7 QC Sample: L1900707-03 Client ID: RB13_22-24												
Methylene chloride	ND	30000	27000	88		27000	91		70-130	3		30
1,1-Dichloroethane	ND	30000	28000	93		28000	94		70-130	1		30
Chloroform	ND	30000	25000	84		26000	86		70-130	2		30
Carbon tetrachloride	ND	30000	24000	79		24000	79		70-130	1		30
1,2-Dichloropropane	ND	30000	29000	96		30000	100		70-130	4		30
Dibromochloromethane	ND	30000	30000	100		30000	100		70-130	0		30
1,1,2-Trichloroethane	ND	30000	100000E	347	Q	88000	294	Q	70-130	16		30
Tetrachloroethene	ND	30000	26000	85		24000	80		70-130	7		30
Chlorobenzene	ND	30000	27000	91		26000	86		70-130	6		30
Trichlorofluoromethane	ND	30000	25000	83		25000	84		70-139	1		30
1,2-Dichloroethane	ND	30000	24000	79		24000	79		70-130	0		30
1,1,1-Trichloroethane	ND	30000	25000	82		25000	82		70-130	0		30
Bromodichloromethane	ND	30000	26000	86		26000	87		70-130	2		30
trans-1,3-Dichloropropene	ND	30000	31000	103		31000	102		70-130	1		30
cis-1,3-Dichloropropene	ND	30000	27000	91		27000	91		70-130	1		30
1,1-Dichloropropene	ND	30000	26000	88		26000	86		70-130	2		30
Bromoform	ND	30000	31000	104		31000	102		70-130	2		30
1,1,2,2-Tetrachloroethane	ND	30000	37000	124		35000	118		70-130	6		30
Benzene	1400	30000	28000	90		28000	89		70-130	1		30
Toluene	490	30000	29000	96		28000	92		70-130	4		30
Ethylbenzene	9700	30000	35000	83		31000	71		70-130	11		30
Chloromethane	ND	30000	32000	108		34000	112		52-130	4		30
Bromomethane	ND	30000	33000	109		35000	116		57-147	6		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 QC Batch ID: WG1196507-6 WG1196507-7 QC Sample: L1900707-03 Client ID: RB13_22-24												
Vinyl chloride	ND	30000	33000	110		34000	113		67-130	3		30
Chloroethane	ND	30000	24000	81		33000	110		50-151	30		30
1,1-Dichloroethene	ND	30000	28000	95		29000	95		65-135	1		30
trans-1,2-Dichloroethene	ND	30000	28000	92		28000	92		70-130	0		30
Trichloroethene	ND	30000	26000	86		25000	83		70-130	4		30
1,2-Dichlorobenzene	ND	30000	25000	83		23000	77		70-130	7		30
1,3-Dichlorobenzene	ND	30000	24000	79		21000	71		70-130	10		30
1,4-Dichlorobenzene	ND	30000	23000	76		21000	68	Q	70-130	11		30
Methyl tert butyl ether	ND	30000	28000	92		28000	95		66-130	2		30
p/m-Xylene	4000	60000	54000	84		49000	75		70-130	10		30
o-Xylene	1200	60000	53000	86		49000	80		70-130	6		30
cis-1,2-Dichloroethene	ND	30000	27000	91		28000	92		70-130	1		30
Dibromomethane	ND	30000	27000	89		27000	89		70-130	0		30
Styrene	ND	60000	54000	91		52000	86		70-130	5		30
Dichlorodifluoromethane	ND	30000	28000	95		29000	96		30-146	2		30
Acetone	ND	30000	27000	90		27000	90		54-140	0		30
Carbon disulfide	ND	30000	27000	91		27000	90		59-130	1		30
2-Butanone	ND	30000	76000	253	Q	40000	133	Q	70-130	62	Q	30
Vinyl acetate	ND	30000	31000	103		32000	105		70-130	3		30
4-Methyl-2-pentanone	ND	30000	41000	137	Q	40000	132	Q	70-130	4		30
1,2,3-Trichloropropane	ND	30000	33000	111		32000	108		68-130	3		30
2-Hexanone	ND	30000	36000	121		37000	122		70-130	1		30
Bromochloromethane	ND	30000	26000	88		27000	90		70-130	2		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 QC Batch ID: WG1196507-6 WG1196507-7 QC Sample: L1900707-03 Client ID: RB13_22-24												
2,2-Dichloropropane	ND	30000	26000	87		26000	87		70-130	0		30
1,2-Dibromoethane	ND	30000	33000	109		32000	108		70-130	1		30
1,3-Dichloropropane	ND	30000	32000	107		32000	107		69-130	0		30
1,1,1,2-Tetrachloroethane	ND	30000	29000	95		28000	94		70-130	2		30
Bromobenzene	ND	30000	27000	91		25000	85		70-130	7		30
n-Butylbenzene	11000	30000	28000	55	Q	22000	37	Q	70-130	22		30
sec-Butylbenzene	2900	30000	25000	74		21000	62	Q	70-130	16		30
tert-Butylbenzene	280J	30000	24000	80		21000	71		70-130	12		30
o-Chlorotoluene	ND	30000	25000	84		23000	76		70-130	11		30
p-Chlorotoluene	ND	30000	24000	80		22000	72		70-130	11		30
1,2-Dibromo-3-chloropropane	ND	30000	30000	101		30000	101		68-130	0		30
Hexachlorobutadiene	ND	30000	19000	62	Q	17000	56	Q	67-130	10		30
Isopropylbenzene	12000	30000	36000	79		31000	62	Q	70-130	15		30
p-Isopropyltoluene	2300	30000	24000	73		20000	60	Q	70-130	17		30
Naphthalene	25000	30000	56000	104		52000	88		70-130	9		30
Acrylonitrile	ND	30000	45000	148	Q	41000	137	Q	70-130	8		30
n-Propylbenzene	30000	30000	47000	55	Q	37000	24	Q	70-130	22		30
1,2,3-Trichlorobenzene	ND	30000	25000	83		23000	76		70-130	8		30
1,2,4-Trichlorobenzene	ND	30000	23000	78		22000	72		70-130	8		30
1,3,5-Trimethylbenzene	6700	30000	29000	74		25000	61	Q	70-130	14		30
1,2,4-Trimethylbenzene	300J	30000	24000	80		22000	72		70-130	11		30
1,4-Dioxane	ND	1500000	1400000	90		1300000	89		65-136	1		30
p-Diethylbenzene	5800	30000	27000	69	Q	22000	53	Q	70-130	20		30

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab 03 Client ID: RB13_22-24 Associated sample(s): 02-03,06-07,09 QC Batch ID: WG1196507-6 WG1196507-7 QC Sample: L1900707-												
p-Ethyltoluene	6400	30000	28000	72		24000	58	Q	70-130	16		30
1,2,4,5-Tetramethylbenzene	20000	30000	38000	58	Q	32000	39	Q	70-130	16		30
Ethyl ether	ND	30000	29000	97		30000	99		67-130	2		30
trans-1,4-Dichloro-2-butene	ND	30000	29000	98		29000	95		70-130	3		30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		88		70-130
4-Bromofluorobenzene	145	Q	134	Q	70-130
Dibromofluoromethane	80		81		70-130
Toluene-d8	112		111		70-130



SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
Client ID: RB13_0-2
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/10/19 02:10
Analyst: SZ
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	300		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	160	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-01

Date Collected: 01/07/19 10:45

Client ID: RB13_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	160		ug/kg	120	22.	1
Benzo(a)pyrene	180		ug/kg	150	47.	1
Benzo(b)fluoranthene	320		ug/kg	120	32.	1
Benzo(k)fluoranthene	98	J	ug/kg	120	31.	1
Chrysene	240		ug/kg	120	20.	1
Acenaphthylene	92	J	ug/kg	150	30.	1
Anthracene	61	J	ug/kg	120	37.	1
Benzo(ghi)perylene	240		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	190		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	50	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	200		ug/kg	150	27.	1
Pyrene	340		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	19	J	ug/kg	190	18.	1
2-Methylnaphthalene	92	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	67	J	ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	34	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	53		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 02:35
 Analyst: SZ
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	52	J	ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	34.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	940		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-02

Date Collected: 01/07/19 11:00

Client ID: RB13_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	22	J	ug/kg	190	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	38.	1
3-Nitroaniline	ND		ug/kg	190	37.	1
4-Nitroaniline	ND		ug/kg	190	81.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	550		ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
Client ID: RB13_18-20
Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	630	200	1
Benzyl Alcohol	ND		ug/kg	190	60.	1
Carbazole	23	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	56		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03 D
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 19:37
 Analyst: RC
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	790	100	5
1,2,4-Trichlorobenzene	ND		ug/kg	990	110	5
Hexachlorobenzene	ND		ug/kg	590	110	5
Bis(2-chloroethyl)ether	ND		ug/kg	890	130	5
2-Chloronaphthalene	ND		ug/kg	990	98.	5
1,2-Dichlorobenzene	ND		ug/kg	990	180	5
1,3-Dichlorobenzene	ND		ug/kg	990	170	5
1,4-Dichlorobenzene	ND		ug/kg	990	170	5
3,3'-Dichlorobenzidine	ND		ug/kg	990	260	5
2,4-Dinitrotoluene	ND		ug/kg	990	200	5
2,6-Dinitrotoluene	ND		ug/kg	990	170	5
Fluoranthene	280	J	ug/kg	590	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	990	100	5
4-Bromophenyl phenyl ether	ND		ug/kg	990	150	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1200	170	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1100	99.	5
Hexachlorobutadiene	ND		ug/kg	990	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2800	900	5
Hexachloroethane	ND		ug/kg	790	160	5
Isophorone	ND		ug/kg	890	130	5
Naphthalene	22000		ug/kg	990	120	5
Nitrobenzene	ND		ug/kg	890	150	5
NDPA/DPA	ND		ug/kg	790	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	990	150	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	990	340	5
Butyl benzyl phthalate	ND		ug/kg	990	250	5
Di-n-butylphthalate	ND		ug/kg	990	190	5
Di-n-octylphthalate	ND		ug/kg	990	340	5

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03 D

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	990	92.	5
Dimethyl phthalate	ND		ug/kg	990	210	5
Benzo(a)anthracene	160	J	ug/kg	590	110	5
Benzo(a)pyrene	ND		ug/kg	790	240	5
Benzo(b)fluoranthene	ND		ug/kg	590	170	5
Benzo(k)fluoranthene	ND		ug/kg	590	160	5
Chrysene	140	J	ug/kg	590	100	5
Acenaphthylene	ND		ug/kg	790	150	5
Anthracene	ND		ug/kg	590	190	5
Benzo(ghi)perylene	120	J	ug/kg	790	120	5
Fluorene	170	J	ug/kg	990	96.	5
Phenanthrene	320	J	ug/kg	590	120	5
Dibenzo(a,h)anthracene	ND		ug/kg	590	110	5
Indeno(1,2,3-cd)pyrene	ND		ug/kg	790	140	5
Pyrene	330	J	ug/kg	590	98.	5
Biphenyl	460	J	ug/kg	2200	230	5
4-Chloroaniline	ND		ug/kg	990	180	5
2-Nitroaniline	ND		ug/kg	990	190	5
3-Nitroaniline	ND		ug/kg	990	190	5
4-Nitroaniline	ND		ug/kg	990	410	5
Dibenzofuran	ND		ug/kg	990	94.	5
2-Methylnaphthalene	16000		ug/kg	1200	120	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	990	100	5
Acetophenone	ND		ug/kg	990	120	5
2,4,6-Trichlorophenol	ND		ug/kg	590	190	5
p-Chloro-m-cresol	ND		ug/kg	990	150	5
2-Chlorophenol	ND		ug/kg	990	120	5
2,4-Dichlorophenol	ND		ug/kg	890	160	5
2,4-Dimethylphenol	ND		ug/kg	990	330	5
2-Nitrophenol	ND		ug/kg	2100	370	5
4-Nitrophenol	ND		ug/kg	1400	400	5
2,4-Dinitrophenol	ND		ug/kg	4800	460	5
4,6-Dinitro-o-cresol	ND		ug/kg	2600	480	5
Pentachlorophenol	ND		ug/kg	790	220	5
Phenol	ND		ug/kg	990	150	5
2-Methylphenol	ND		ug/kg	990	150	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1400	160	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03 D
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	990	190	5
Benzoic Acid	ND		ug/kg	3200	1000	5
Benzyl Alcohol	ND		ug/kg	990	300	5
Carbazole	ND		ug/kg	990	96.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	239	Q	23-120
2-Fluorobiphenyl	91		30-120
2,4,6-Tribromophenol	101		10-136
4-Terphenyl-d14	84		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 00:02
 Analyst: SZ
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-04

Date Collected: 01/07/19 10:55

Client ID: RB13_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
Client ID: RB13_33-35
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	101		10-136
4-Terphenyl-d14	77		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 00:28
 Analyst: SZ
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	52	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	1100		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	510		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	140	J	ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-05

Date Collected: 01/07/19 12:20

Client ID: RB14_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	500		ug/kg	110	22.	1
Benzo(a)pyrene	650		ug/kg	150	47.	1
Benzo(b)fluoranthene	720		ug/kg	110	32.	1
Benzo(k)fluoranthene	200		ug/kg	110	31.	1
Chrysene	530		ug/kg	110	20.	1
Acenaphthylene	100	J	ug/kg	150	30.	1
Anthracene	280		ug/kg	110	37.	1
Benzo(ghi)perylene	590		ug/kg	150	22.	1
Fluorene	82	J	ug/kg	190	18.	1
Phenanthrene	870		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	92	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	540		ug/kg	150	27.	1
Pyrene	1100		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	57	J	ug/kg	190	18.	1
2-Methylnaphthalene	210	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	390		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	110	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	57		10-136
4-Terphenyl-d14	52		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 00:54
 Analyst: SZ
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	49	J	ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	120	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-06

Date Collected: 01/07/19 12:25

Client ID: RB14_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	32.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	150	23.	1
Fluorene	19	J	ug/kg	190	19.	1
Phenanthrene	45	J	ug/kg	120	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	27.	1
Pyrene	44	J	ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	200	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	ND		ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	57		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/12/19 01:29
 Analyst: EK
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	790	100	5
1,2,4-Trichlorobenzene	ND		ug/kg	980	110	5
Hexachlorobenzene	ND		ug/kg	590	110	5
Bis(2-chloroethyl)ether	ND		ug/kg	880	130	5
2-Chloronaphthalene	ND		ug/kg	980	98.	5
1,2-Dichlorobenzene	ND		ug/kg	980	180	5
1,3-Dichlorobenzene	ND		ug/kg	980	170	5
1,4-Dichlorobenzene	ND		ug/kg	980	170	5
3,3'-Dichlorobenzidine	ND		ug/kg	980	260	5
2,4-Dinitrotoluene	ND		ug/kg	980	200	5
2,6-Dinitrotoluene	ND		ug/kg	980	170	5
Fluoranthene	250	J	ug/kg	590	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	980	100	5
4-Bromophenyl phenyl ether	ND		ug/kg	980	150	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1200	170	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1100	98.	5
Hexachlorobutadiene	ND		ug/kg	980	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2800	890	5
Hexachloroethane	ND		ug/kg	790	160	5
Isophorone	ND		ug/kg	880	130	5
Naphthalene	9400		ug/kg	980	120	5
Nitrobenzene	ND		ug/kg	880	140	5
NDPA/DPA	ND		ug/kg	790	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	980	150	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	980	340	5
Butyl benzyl phthalate	ND		ug/kg	980	250	5
Di-n-butylphthalate	ND		ug/kg	980	190	5
Di-n-octylphthalate	ND		ug/kg	980	330	5

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D

Date Collected: 01/07/19 12:30

Client ID: RB14_23-25

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	980	91.	5
Dimethyl phthalate	ND		ug/kg	980	210	5
Benzo(a)anthracene	120	J	ug/kg	590	110	5
Benzo(a)pyrene	ND		ug/kg	790	240	5
Benzo(b)fluoranthene	ND		ug/kg	590	160	5
Benzo(k)fluoranthene	ND		ug/kg	590	160	5
Chrysene	ND		ug/kg	590	100	5
Acenaphthylene	ND		ug/kg	790	150	5
Anthracene	ND		ug/kg	590	190	5
Benzo(ghi)perylene	ND		ug/kg	790	120	5
Fluorene	ND		ug/kg	980	96.	5
Phenanthrene	140	J	ug/kg	590	120	5
Dibenzo(a,h)anthracene	ND		ug/kg	590	110	5
Indeno(1,2,3-cd)pyrene	ND		ug/kg	790	140	5
Pyrene	240	J	ug/kg	590	98.	5
Biphenyl	ND		ug/kg	2200	230	5
4-Chloroaniline	ND		ug/kg	980	180	5
2-Nitroaniline	ND		ug/kg	980	190	5
3-Nitroaniline	ND		ug/kg	980	180	5
4-Nitroaniline	ND		ug/kg	980	410	5
Dibenzofuran	ND		ug/kg	980	93.	5
2-Methylnaphthalene	12000		ug/kg	1200	120	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	980	100	5
Acetophenone	ND		ug/kg	980	120	5
2,4,6-Trichlorophenol	ND		ug/kg	590	190	5
p-Chloro-m-cresol	ND		ug/kg	980	150	5
2-Chlorophenol	ND		ug/kg	980	120	5
2,4-Dichlorophenol	ND		ug/kg	880	160	5
2,4-Dimethylphenol	ND		ug/kg	980	320	5
2-Nitrophenol	ND		ug/kg	2100	370	5
4-Nitrophenol	ND		ug/kg	1400	400	5
2,4-Dinitrophenol	ND		ug/kg	4700	460	5
4,6-Dinitro-o-cresol	ND		ug/kg	2600	470	5
Pentachlorophenol	ND		ug/kg	790	220	5
Phenol	ND		ug/kg	980	150	5
2-Methylphenol	ND		ug/kg	980	150	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1400	150	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	980	190	5
Benzoic Acid	ND		ug/kg	3200	990	5
Benzyl Alcohol	ND		ug/kg	980	300	5
Carbazole	ND		ug/kg	980	96.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	268	Q	23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	66		10-136
4-Terphenyl-d14	67		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 12:26
 Analyst: JG
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-08

Date Collected: 01/07/19 12:35

Client ID: RB14_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	97		10-136
4-Terphenyl-d14	72		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 12:50
 Analyst: JG
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	140	J	ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	ND		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	180	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	95.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	ND		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	66		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/09/19 19:09
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	47		10-120
4-Terphenyl-d14	73		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/09/19 21:03
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	88		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/09/19 21:29
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1195621-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/09/19 21:29
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1195621-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	69.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	160	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/09/19 21:29
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1195621-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	91		25-120
Phenol-d6	98		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	104		10-136
4-Terphenyl-d14	81		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/09/19 16:51
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1195687-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/09/19 16:51
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1195687-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/09/19 16:51
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1195687-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	79		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/09/19 14:57
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG1195689-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	0.02	J	ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01
Chrysene	0.01	J	ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	0.03	J	ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	0.02	J	ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D-SIM
 Analytical Date: 01/09/19 14:57
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 10:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG1195689-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	91		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1195621-2 WG1195621-3								
Acenaphthene	82		71		31-137	14		50
1,2,4-Trichlorobenzene	76		64		38-107	17		50
Hexachlorobenzene	80		67		40-140	18		50
Bis(2-chloroethyl)ether	76		62		40-140	20		50
2-Chloronaphthalene	79		69		40-140	14		50
1,2-Dichlorobenzene	73		61		40-140	18		50
1,3-Dichlorobenzene	73		60		40-140	20		50
1,4-Dichlorobenzene	74		61		28-104	19		50
3,3'-Dichlorobenzidine	46		43		40-140	7		50
2,4-Dinitrotoluene	97		82		40-132	17		50
2,6-Dinitrotoluene	90		84		40-140	7		50
Fluoranthene	77		72		40-140	7		50
4-Chlorophenyl phenyl ether	78		64		40-140	20		50
4-Bromophenyl phenyl ether	80		68		40-140	16		50
Bis(2-chloroisopropyl)ether	76		62		40-140	20		50
Bis(2-chloroethoxy)methane	81		68		40-117	17		50
Hexachlorobutadiene	68		58		40-140	16		50
Hexachlorocyclopentadiene	70		60		40-140	15		50
Hexachloroethane	77		64		40-140	18		50
Isophorone	84		72		40-140	15		50
Naphthalene	72		60		40-140	18		50
Nitrobenzene	81		69		40-140	16		50
NDPA/DPA	86		71		36-157	19		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1195621-2 WG1195621-3								
n-Nitrosodi-n-propylamine	82		72		32-121	13		50
Bis(2-ethylhexyl)phthalate	80		69		40-140	15		50
Butyl benzyl phthalate	77		76		40-140	1		50
Di-n-butylphthalate	86		76		40-140	12		50
Di-n-octylphthalate	80		80		40-140	0		50
Diethyl phthalate	88		73		40-140	19		50
Dimethyl phthalate	82		76		40-140	8		50
Benzo(a)anthracene	74		63		40-140	16		50
Benzo(a)pyrene	78		76		40-140	3		50
Benzo(b)fluoranthene	80		76		40-140	5		50
Benzo(k)fluoranthene	73		76		40-140	4		50
Chrysene	73		63		40-140	15		50
Acenaphthylene	83		76		40-140	9		50
Anthracene	77		68		40-140	12		50
Benzo(ghi)perylene	77		66		40-140	15		50
Fluorene	86		70		40-140	21		50
Phenanthrene	74		65		40-140	13		50
Dibenzo(a,h)anthracene	78		65		40-140	18		50
Indeno(1,2,3-cd)pyrene	80		66		40-140	19		50
Pyrene	75		70		35-142	7		50
Biphenyl	83		72		54-104	14		50
4-Chloroaniline	41		39	Q	40-140	5		50
2-Nitroaniline	87		80		47-134	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1195621-2 WG1195621-3								
3-Nitroaniline	68		63		26-129	8		50
4-Nitroaniline	88		73		41-125	19		50
Dibenzofuran	81		69		40-140	16		50
2-Methylnaphthalene	76		66		40-140	14		50
1,2,4,5-Tetrachlorobenzene	77		68		40-117	12		50
Acetophenone	86		74		14-144	15		50
2,4,6-Trichlorophenol	85		76		30-130	11		50
p-Chloro-m-cresol	85		75		26-103	13		50
2-Chlorophenol	81		68		25-102	17		50
2,4-Dichlorophenol	85		74		30-130	14		50
2,4-Dimethylphenol	85		75		30-130	13		50
2-Nitrophenol	86		73		30-130	16		50
4-Nitrophenol	96		80		11-114	18		50
2,4-Dinitrophenol	83		77		4-130	8		50
4,6-Dinitro-o-cresol	93		80		10-130	15		50
Pentachlorophenol	78		69		17-109	12		50
Phenol	78		66		26-90	17		50
2-Methylphenol	82		73		30-130.	12		50
3-Methylphenol/4-Methylphenol	84		74		30-130	13		50
2,4,5-Trichlorophenol	84		75		30-130	11		50
Benzoic Acid	46		41		10-110	11		50
Benzyl Alcohol	87		76		40-140	13		50
Carbazole	78		68		54-128	14		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1195621-2 WG1195621-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	83		66		25-120
Phenol-d6	85		70		10-120
Nitrobenzene-d5	84		72		23-120
2-Fluorobiphenyl	79		68		30-120
2,4,6-Tribromophenol	93		79		10-136
4-Terphenyl-d14	66		61		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1195687-2 WG1195687-3								
Acenaphthene	65		71		37-111	9		30
1,2,4-Trichlorobenzene	61		70		39-98	14		30
Hexachlorobenzene	72		75		40-140	4		30
Bis(2-chloroethyl)ether	56		73		40-140	26		30
2-Chloronaphthalene	67		79		40-140	16		30
1,2-Dichlorobenzene	57		70		40-140	20		30
1,3-Dichlorobenzene	54		69		40-140	24		30
1,4-Dichlorobenzene	53		68		36-97	25		30
3,3'-Dichlorobenzidine	74		83		40-140	11		30
2,4-Dinitrotoluene	75		78		48-143	4		30
2,6-Dinitrotoluene	84		83		40-140	1		30
Fluoranthene	77		82		40-140	6		30
4-Chlorophenyl phenyl ether	72		70		40-140	3		30
4-Bromophenyl phenyl ether	74		82		40-140	10		30
Bis(2-chloroisopropyl)ether	61		76		40-140	22		30
Bis(2-chloroethoxy)methane	72		79		40-140	9		30
Hexachlorobutadiene	50		70		40-140	33	Q	30
Hexachlorocyclopentadiene	53		71		40-140	29		30
Hexachloroethane	56		67		40-140	18		30
Isophorone	70		84		40-140	18		30
Naphthalene	58		74		40-140	24		30
Nitrobenzene	62		73		40-140	16		30
NDPA/DPA	78		75		40-140	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1195687-2 WG1195687-3								
n-Nitrosodi-n-propylamine	68		82		29-132	19		30
Bis(2-ethylhexyl)phthalate	88		99		40-140	12		30
Butyl benzyl phthalate	99		105		40-140	6		30
Di-n-butylphthalate	79		83		40-140	5		30
Di-n-octylphthalate	99		100		40-140	1		30
Diethyl phthalate	79		76		40-140	4		30
Dimethyl phthalate	83		81		40-140	2		30
Benzo(a)anthracene	81		88		40-140	8		30
Benzo(a)pyrene	84		86		40-140	2		30
Benzo(b)fluoranthene	84		87		40-140	4		30
Benzo(k)fluoranthene	87		93		40-140	7		30
Chrysene	79		84		40-140	6		30
Acenaphthylene	73		77		45-123	5		30
Anthracene	76		85		40-140	11		30
Benzo(ghi)perylene	80		100		40-140	22		30
Fluorene	73		70		40-140	4		30
Phenanthrene	76		80		40-140	5		30
Dibenzo(a,h)anthracene	80		95		40-140	17		30
Indeno(1,2,3-cd)pyrene	78		91		40-140	15		30
Pyrene	75		82		26-127	9		30
Biphenyl	64		75		40-140	16		30
4-Chloroaniline	60		72		40-140	18		30
2-Nitroaniline	84		88		52-143	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1195687-2 WG1195687-3								
3-Nitroaniline	70		79		25-145	12		30
4-Nitroaniline	79		71		51-143	11		30
Dibenzofuran	70		74		40-140	6		30
2-Methylnaphthalene	62		79		40-140	24		30
1,2,4,5-Tetrachlorobenzene	59		72		2-134	20		30
Acetophenone	63		78		39-129	21		30
2,4,6-Trichlorophenol	78		88		30-130	12		30
p-Chloro-m-cresol	83		90		23-97	8		30
2-Chlorophenol	61		77		27-123	23		30
2,4-Dichlorophenol	80		81		30-130	1		30
2,4-Dimethylphenol	48		58		30-130	19		30
2-Nitrophenol	67		83		30-130	21		30
4-Nitrophenol	73		74		10-80	1		30
2,4-Dinitrophenol	80		82		20-130	2		30
4,6-Dinitro-o-cresol	77		76		20-164	1		30
Pentachlorophenol	80		81		9-103	1		30
Phenol	52		63		12-110	19		30
2-Methylphenol	66		78		30-130	17		30
3-Methylphenol/4-Methylphenol	75		85		30-130	13		30
2,4,5-Trichlorophenol	82		86		30-130	5		30
Benzoic Acid	66		64		10-164	3		30
Benzyl Alcohol	68		76		26-116	11		30
Carbazole	84		89		55-144	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1195687-2 WG1195687-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	62		68		21-120
Phenol-d6	52		61		10-120
Nitrobenzene-d5	61		75		23-120
2-Fluorobiphenyl	69		79		15-120
2,4,6-Tribromophenol	83		76		10-120
4-Terphenyl-d14	70		73		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG1195689-2 WG1195689-3								
Acenaphthene	63		66		40-140	5		40
2-Chloronaphthalene	73		77		40-140	5		40
Fluoranthene	79		81		40-140	3		40
Hexachlorobutadiene	70		72		40-140	3		40
Naphthalene	66		69		40-140	4		40
Benzo(a)anthracene	78		80		40-140	3		40
Benzo(a)pyrene	68		69		40-140	1		40
Benzo(b)fluoranthene	64		65		40-140	2		40
Benzo(k)fluoranthene	67		68		40-140	1		40
Chrysene	71		72		40-140	1		40
Acenaphthylene	77		80		40-140	4		40
Anthracene	72		74		40-140	3		40
Benzo(ghi)perylene	65		65		40-140	0		40
Fluorene	67		70		40-140	4		40
Phenanthrene	70		73		40-140	4		40
Dibenzo(a,h)anthracene	66		67		40-140	2		40
Indeno(1,2,3-cd)pyrene	79		80		40-140	1		40
Pyrene	80		82		40-140	2		40
2-Methylnaphthalene	72		75		40-140	4		40
Pentachlorophenol	66		64		40-140	3		40
Hexachlorobenzene	66		69		40-140	4		40
Hexachloroethane	60		62		40-140	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG1195689-2 WG1195689-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	52		54		21-120
Phenol-d6	44		45		10-120
Nitrobenzene-d5	73		76		23-120
2-Fluorobiphenyl	74		78		15-120
2,4,6-Tribromophenol	67		69		10-120
4-Terphenyl-d14	81		83		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195621-4 WG1195621-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
Acenaphthene	ND	1570	1300	83		1400	90		31-137	7		50
1,2,4-Trichlorobenzene	ND	1570	1600	100		1700	110	Q	38-107	6		50
Hexachlorobenzene	ND	1570	1500	95		1600	100		40-140	6		50
Bis(2-chloroethyl)ether	ND	1570	1300	83		1400	90		40-140	7		50
2-Chloronaphthalene	ND	1570	1600	100		1800	120		40-140	12		50
1,2-Dichlorobenzene	ND	1570	1400	89		1400	90		40-140	0		50
1,3-Dichlorobenzene	ND	1570	1300	83		1400	90		40-140	7		50
1,4-Dichlorobenzene	ND	1570	1300	83		1400	90		28-104	7		50
3,3'-Dichlorobenzidine	ND	1570	930J	59		1100	71		40-140	17		50
2,4-Dinitrotoluene	ND	1570	1100	70		1300	83		40-132	17		50
2,6-Dinitrotoluene	ND	1570	1300	83		1600	100		40-140	21		50
Fluoranthene	280J	1570	1500	95		1700	110		40-140	13		50
4-Chlorophenyl phenyl ether	ND	1570	1300	83		1500	96		40-140	14		50
4-Bromophenyl phenyl ether	ND	1570	1400	89		1500	96		40-140	7		50
Bis(2-chloroisopropyl)ether	ND	1570	1300	83		1400	90		40-140	7		50
Bis(2-chloroethoxy)methane	ND	1570	1500	95		1800	120	Q	40-117	18		50
Hexachlorobutadiene	ND	1570	1800	110		1900	120		40-140	5		50
Hexachlorocyclopentadiene	ND	1570	1000J	63		1100J	71		40-140	10		50
Hexachloroethane	ND	1570	2800	180	Q	2800	180	Q	40-140	0		50
Isophorone	ND	1570	1800	110		1900	120		40-140	5		50
Naphthalene	22000	1570	11000	0	Q	10000	0	Q	40-140	10		50
Nitrobenzene	ND	1570	730J	46		610J	39	Q	40-140	18		50
NDPA/DPA	ND	1570	1300	83		1400	90		36-157	7		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195621-4 WG1195621-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
n-Nitrosodi-n-propylamine	ND	1570	2000	130	Q	2000	130	Q	32-121	0		50
Bis(2-ethylhexyl)phthalate	ND	1570	1300	83		1500	96		40-140	14		50
Butyl benzyl phthalate	ND	1570	1300	83		1500	96		40-140	14		50
Di-n-butylphthalate	ND	1570	1400	89		1700	110		40-140	19		50
Di-n-octylphthalate	ND	1570	1300	83		1500	96		40-140	14		50
Diethyl phthalate	ND	1570	1300	83		1400	90		40-140	7		50
Dimethyl phthalate	ND	1570	1700	110		1800	120		40-140	6		50
Benzo(a)anthracene	160J	1570	1400	89		1500	96		40-140	7		50
Benzo(a)pyrene	ND	1570	1400	89		1600	100		40-140	13		50
Benzo(b)fluoranthene	ND	1570	1300	83		1500	96		40-140	14		50
Benzo(k)fluoranthene	ND	1570	1400	89		1500	96		40-140	7		50
Chrysene	140J	1570	1400	89		1500	96		40-140	7		50
Acenaphthylene	ND	1570	1600	100		1800	120		40-140	12		50
Anthracene	ND	1570	1500	95		1600	100		40-140	6		50
Benzo(ghi)perylene	120J	1570	1400	89		1500	96		40-140	7		50
Fluorene	170J	1570	1400	89		1500	96		40-140	7		50
Phenanthrene	320J	1570	1500	95		1600	100		40-140	6		50
Dibenzo(a,h)anthracene	ND	1570	1400	89		1500	96		40-140	7		50
Indeno(1,2,3-cd)pyrene	ND	1570	1400	89		1500	96		40-140	7		50
Pyrene	330J	1570	1400	89		1700	110		35-142	19		50
Biphenyl	460J	1570	1800J	110	Q	1900J	120	Q	54-104	5		50
4-Chloroaniline	ND	1570	870J	55		980	63		40-140	12		50
2-Nitroaniline	ND	1570	1800	110		2000	130		47-134	11		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195621-4 WG1195621-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
3-Nitroaniline	ND	1570	960J	61		1200	77		26-129	22		50
4-Nitroaniline	ND	1570	1200	76		1300	83		41-125	8		50
Dibenzofuran	ND	1570	1300	83		1400	90		40-140	7		50
2-Methylnaphthalene	16000	1570	8800	0	Q	8400	0	Q	40-140	5		50
1,2,4,5-Tetrachlorobenzene	ND	1570	1700	110		1800	120	Q	40-117	6		50
Acetophenone	ND	1570	ND	0	Q	ND	0	Q	14-144	NC		50
2,4,6-Trichlorophenol	ND	1570	1700	110		1800	120		30-130	6		50
p-Chloro-m-cresol	ND	1570	1600	100		1800	120	Q	26-103	12		50
2-Chlorophenol	ND	1570	1400	89		1600	100		25-102	13		50
2,4-Dichlorophenol	ND	1570	1600	100		1700	110		30-130	6		50
2,4-Dimethylphenol	ND	1570	1600	100		1700	110		30-130	6		50
2-Nitrophenol	ND	1570	1000J	63		1100J	71		30-130	10		50
4-Nitrophenol	ND	1570	1300J	83		1700	110		11-114	27		50
2,4-Dinitrophenol	ND	1570	ND	0	Q	ND	0	Q	4-130	NC		50
4,6-Dinitro-o-cresol	ND	1570	ND	0	Q	ND	0	Q	10-130	NC		50
Pentachlorophenol	ND	1570	1500	95		1500	96		17-109	0		50
Phenol	ND	1570	1400	89		1500	96	Q	26-90	7		50
2-Methylphenol	ND	1570	1500	95		1600	100		30-130.	6		50
3-Methylphenol/4-Methylphenol	ND	1570	1500	95		1500	96		30-130	0		50
2,4,5-Trichlorophenol	ND	1570	1800	110		1900	120		30-130	5		50
Benzoic Acid	ND	1570	ND	0	Q	ND	0	Q	10-110	NC		50
Benzyl Alcohol	ND	1570	1800	110		1900	120		40-140	5		50
Carbazole	ND	1570	1400	89		1600	100		54-128	13		50

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatiles Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195621-4 WG1195621-5 QC Sample: L1900707-03 Client ID: RB13_22-24

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	103		108		10-136
2-Fluorobiphenyl	107		111		30-120
2-Fluorophenol	88		93		25-120
4-Terphenyl-d14	83		97		18-120
Nitrobenzene-d5	116		116		23-120
Phenol-d6	85		96		10-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 15:10
 Analyst: WR
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:37
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.6	3.43	1	A
Aroclor 1221	ND		ug/kg	38.6	3.87	1	A
Aroclor 1232	ND		ug/kg	38.6	8.19	1	A
Aroclor 1242	ND		ug/kg	38.6	5.21	1	A
Aroclor 1248	ND		ug/kg	38.6	5.79	1	A
Aroclor 1254	ND		ug/kg	38.6	4.23	1	A
Aroclor 1260	ND		ug/kg	38.6	7.14	1	A
Aroclor 1262	ND		ug/kg	38.6	4.91	1	A
Aroclor 1268	ND		ug/kg	38.6	4.00	1	A
PCBs, Total	ND		ug/kg	38.6	3.43	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	47		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 15:22
 Analyst: WR
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.7	3.35	1	A
Aroclor 1221	ND		ug/kg	37.7	3.78	1	A
Aroclor 1232	ND		ug/kg	37.7	8.00	1	A
Aroclor 1242	ND		ug/kg	37.7	5.08	1	A
Aroclor 1248	ND		ug/kg	37.7	5.66	1	A
Aroclor 1254	ND		ug/kg	37.7	4.13	1	A
Aroclor 1260	ND		ug/kg	37.7	6.97	1	A
Aroclor 1262	ND		ug/kg	37.7	4.79	1	A
Aroclor 1268	ND		ug/kg	37.7	3.91	1	A
PCBs, Total	ND		ug/kg	37.7	3.35	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03
Client ID: RB13_22-24
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/08/19 15:35
Analyst: WR
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 01/08/19 05:33
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.3	3.40	1	A
Aroclor 1221	ND		ug/kg	38.3	3.83	1	A
Aroclor 1232	ND		ug/kg	38.3	8.11	1	A
Aroclor 1242	ND		ug/kg	38.3	5.16	1	A
Aroclor 1248	ND		ug/kg	38.3	5.74	1	A
Aroclor 1254	ND		ug/kg	38.3	4.19	1	A
Aroclor 1260	ND		ug/kg	38.3	7.07	1	A
Aroclor 1262	ND		ug/kg	38.3	4.86	1	A
Aroclor 1268	ND		ug/kg	38.3	3.96	1	A
PCBs, Total	ND		ug/kg	38.3	3.40	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 15:47
 Analyst: WR
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.0	3.28	1	A
Aroclor 1221	ND		ug/kg	37.0	3.70	1	A
Aroclor 1232	ND		ug/kg	37.0	7.84	1	A
Aroclor 1242	ND		ug/kg	37.0	4.98	1	A
Aroclor 1248	ND		ug/kg	37.0	5.54	1	A
Aroclor 1254	ND		ug/kg	37.0	4.04	1	A
Aroclor 1260	ND		ug/kg	37.0	6.83	1	A
Aroclor 1262	ND		ug/kg	37.0	4.69	1	A
Aroclor 1268	ND		ug/kg	37.0	3.83	1	A
PCBs, Total	ND		ug/kg	37.0	3.28	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	50		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 15:59
 Analyst: WR
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.7	3.43	1	A
Aroclor 1221	ND		ug/kg	38.7	3.87	1	A
Aroclor 1232	ND		ug/kg	38.7	8.20	1	A
Aroclor 1242	ND		ug/kg	38.7	5.21	1	A
Aroclor 1248	ND		ug/kg	38.7	5.80	1	A
Aroclor 1254	ND		ug/kg	38.7	4.23	1	A
Aroclor 1260	ND		ug/kg	38.7	7.15	1	A
Aroclor 1262	ND		ug/kg	38.7	4.91	1	A
Aroclor 1268	ND		ug/kg	38.7	4.01	1	A
PCBs, Total	ND		ug/kg	38.7	3.43	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	40		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 16:12
 Analyst: WR
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.9	3.28	1	A
Aroclor 1221	ND		ug/kg	36.9	3.70	1	A
Aroclor 1232	ND		ug/kg	36.9	7.82	1	A
Aroclor 1242	ND		ug/kg	36.9	4.97	1	A
Aroclor 1248	ND		ug/kg	36.9	5.53	1	A
Aroclor 1254	ND		ug/kg	36.9	4.03	1	A
Aroclor 1260	ND		ug/kg	36.9	6.82	1	A
Aroclor 1262	ND		ug/kg	36.9	4.68	1	A
Aroclor 1268	ND		ug/kg	36.9	3.82	1	A
PCBs, Total	ND		ug/kg	36.9	3.28	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/09/19 13:46
 Analyst: WR
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.6	3.52	1	A
Aroclor 1221	ND		ug/kg	39.6	3.97	1	A
Aroclor 1232	ND		ug/kg	39.6	8.41	1	A
Aroclor 1242	ND		ug/kg	39.6	5.34	1	A
Aroclor 1248	ND		ug/kg	39.6	5.95	1	A
Aroclor 1254	ND		ug/kg	39.6	4.34	1	A
Aroclor 1260	ND		ug/kg	39.6	7.33	1	A
Aroclor 1262	ND		ug/kg	39.6	5.04	1	A
Aroclor 1268	ND		ug/kg	39.6	4.11	1	A
PCBs, Total	ND		ug/kg	39.6	3.52	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	148		30-150	A
Decachlorobiphenyl	139		30-150	A
2,4,5,6-Tetrachloro-m-xylene	152	Q	30-150	B
Decachlorobiphenyl	160	Q	30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 16:36
 Analyst: WR
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	3.27	1	A
Aroclor 1221	ND		ug/kg	36.8	3.69	1	A
Aroclor 1232	ND		ug/kg	36.8	7.80	1	A
Aroclor 1242	ND		ug/kg	36.8	4.96	1	A
Aroclor 1248	ND		ug/kg	36.8	5.52	1	A
Aroclor 1254	ND		ug/kg	36.8	4.03	1	A
Aroclor 1260	ND		ug/kg	36.8	6.80	1	A
Aroclor 1262	ND		ug/kg	36.8	4.67	1	A
Aroclor 1268	ND		ug/kg	36.8	3.81	1	A
PCBs, Total	ND		ug/kg	36.8	3.27	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
Client ID: SODUP04_010719
Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/09/19 02:06
Analyst: WR
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 01/08/19 05:37
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.5	3.51	1	A
Aroclor 1221	ND		ug/kg	39.5	3.96	1	A
Aroclor 1232	ND		ug/kg	39.5	8.37	1	A
Aroclor 1242	ND		ug/kg	39.5	5.32	1	A
Aroclor 1248	ND		ug/kg	39.5	5.92	1	A
Aroclor 1254	ND		ug/kg	39.5	4.32	1	A
Aroclor 1260	ND		ug/kg	39.5	7.30	1	A
Aroclor 1262	ND		ug/kg	39.5	5.02	1	A
Aroclor 1268	ND		ug/kg	39.5	4.09	1	A
PCBs, Total	ND		ug/kg	39.5	3.51	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
Client ID: SOFB03_010719
Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/09/19 14:11
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 08:22
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/09/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/08/19 07:19
 Analyst: HT

Extraction Method: EPA 3546
 Extraction Date: 01/07/19 06:21
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/07/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-09 Batch: WG1195268-1						
Aroclor 1016	ND		ug/kg	31.7	2.82	A
Aroclor 1221	ND		ug/kg	31.7	3.18	A
Aroclor 1232	ND		ug/kg	31.7	6.72	A
Aroclor 1242	ND		ug/kg	31.7	4.28	A
Aroclor 1248	ND		ug/kg	31.7	4.76	A
Aroclor 1254	ND		ug/kg	31.7	3.47	A
Aroclor 1260	ND		ug/kg	31.7	5.86	A
Aroclor 1262	ND		ug/kg	31.7	4.03	A
Aroclor 1268	ND		ug/kg	31.7	3.29	A
PCBs, Total	ND		ug/kg	31.7	2.82	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	102		30-150	B
Decachlorobiphenyl	105		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 01/09/19 11:01
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 08:22
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/09/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 11 Batch: WG1195614-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	87		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1195268-2 WG1195268-3									
Aroclor 1016	85		80		40-140	6		50	A
Aroclor 1260	80		79		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		89		30-150	A
Decachlorobiphenyl	97		95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		97		30-150	B
Decachlorobiphenyl	100		103		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 11 Batch: WG1195614-2 WG1195614-3									
Aroclor 1016	73		77		40-140	6		50	A
Aroclor 1260	75		79		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		84		30-150	A
Decachlorobiphenyl	73		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		86		30-150	B
Decachlorobiphenyl	80		89		30-150	B

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195268-4 WG1195268-5 QC Sample: L1900707-03 Client ID: RB13_22-24													
Aroclor 1016	ND	247	91.6	37	Q	90.9	38	Q	40-140	1		50	A
Aroclor 1260	ND	247	98.0	40	Q	92.9	38	Q	40-140	5		50	A

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	31		30		30-150	A
Decachlorobiphenyl	42		39		30-150	A
2,4,5,6-Tetrachloro-m-xylene	37		33		30-150	B
Decachlorobiphenyl	43		37		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:17
 Analyst: BM
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:41
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.360	1	A
Lindane	ND		ug/kg	0.766	0.343	1	A
Alpha-BHC	ND		ug/kg	0.766	0.218	1	A
Beta-BHC	ND		ug/kg	1.84	0.698	1	A
Heptachlor	ND		ug/kg	0.920	0.412	1	A
Aldrin	ND		ug/kg	1.84	0.648	1	A
Heptachlor epoxide	ND		ug/kg	3.45	1.03	1	A
Endrin	ND		ug/kg	0.766	0.314	1	A
Endrin aldehyde	ND		ug/kg	2.30	0.805	1	A
Endrin ketone	ND		ug/kg	1.84	0.474	1	A
Dieldrin	ND		ug/kg	1.15	0.575	1	A
4,4'-DDE	ND		ug/kg	1.84	0.425	1	A
4,4'-DDD	ND		ug/kg	1.84	0.656	1	A
4,4'-DDT	ND		ug/kg	3.45	1.48	1	A
Endosulfan I	ND		ug/kg	1.84	0.435	1	A
Endosulfan II	ND		ug/kg	1.84	0.615	1	A
Endosulfan sulfate	ND		ug/kg	0.766	0.365	1	A
Methoxychlor	ND		ug/kg	3.45	1.07	1	A
Toxaphene	ND		ug/kg	34.5	9.66	1	A
cis-Chlordane	ND		ug/kg	2.30	0.641	1	A
trans-Chlordane	ND		ug/kg	2.30	0.607	1	A
Chlordane	ND		ug/kg	14.9	6.09	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-01

Date Collected: 01/07/19 10:45

Client ID: RB13_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	101		30-150	B
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	95		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 22:14
 Analyst: SL
 Percent Solids: 86%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	192	12.1	1	A
2,4,5-T	ND		ug/kg	192	5.94	1	A
2,4,5-TP (Silvex)	ND		ug/kg	192	5.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	90		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:29
 Analyst: BM
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:41
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.86	0.363	1	A
Lindane	ND		ug/kg	0.773	0.346	1	A
Alpha-BHC	ND		ug/kg	0.773	0.220	1	A
Beta-BHC	ND		ug/kg	1.86	0.703	1	A
Heptachlor	ND		ug/kg	0.928	0.416	1	A
Aldrin	ND		ug/kg	1.86	0.653	1	A
Heptachlor epoxide	ND		ug/kg	3.48	1.04	1	A
Endrin	ND		ug/kg	0.773	0.317	1	A
Endrin aldehyde	ND		ug/kg	2.32	0.812	1	A
Endrin ketone	ND		ug/kg	1.86	0.478	1	A
Dieldrin	ND		ug/kg	1.16	0.580	1	A
4,4'-DDE	ND		ug/kg	1.86	0.429	1	A
4,4'-DDD	ND		ug/kg	1.86	0.662	1	A
4,4'-DDT	ND		ug/kg	3.48	1.49	1	A
Endosulfan I	ND		ug/kg	1.86	0.438	1	A
Endosulfan II	ND		ug/kg	1.86	0.620	1	A
Endosulfan sulfate	ND		ug/kg	0.773	0.368	1	A
Methoxychlor	ND		ug/kg	3.48	1.08	1	A
Toxaphene	ND		ug/kg	34.8	9.74	1	A
cis-Chlordane	ND		ug/kg	2.32	0.646	1	A
trans-Chlordane	ND		ug/kg	2.32	0.612	1	A
Chlordane	ND		ug/kg	15.1	6.14	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	104		30-150	B
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	104		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 22:34
 Analyst: SL
 Percent Solids: 84%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	195	12.3	1	A
2,4,5-T	ND		ug/kg	195	6.04	1	A
2,4,5-TP (Silvex)	ND		ug/kg	195	5.18	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	110		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:42
 Analyst: BM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:41
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.87	0.366	1	A
Lindane	ND		ug/kg	0.780	0.348	1	A
Alpha-BHC	ND		ug/kg	0.780	0.221	1	A
Beta-BHC	ND		ug/kg	1.87	0.710	1	A
Heptachlor	ND		ug/kg	0.936	0.420	1	A
Aldrin	ND		ug/kg	1.87	0.659	1	A
Heptachlor epoxide	ND		ug/kg	3.51	1.05	1	A
Endrin	ND		ug/kg	0.780	0.320	1	A
Endrin aldehyde	ND		ug/kg	2.34	0.819	1	A
Endrin ketone	ND		ug/kg	1.87	0.482	1	A
Dieldrin	ND		ug/kg	1.17	0.585	1	A
4,4'-DDE	ND		ug/kg	1.87	0.433	1	A
4,4'-DDD	ND		ug/kg	1.87	0.668	1	A
4,4'-DDT	ND		ug/kg	3.51	1.50	1	A
Endosulfan I	ND		ug/kg	1.87	0.442	1	A
Endosulfan II	ND		ug/kg	1.87	0.625	1	A
Endosulfan sulfate	ND		ug/kg	0.780	0.371	1	A
Methoxychlor	ND		ug/kg	3.51	1.09	1	A
Toxaphene	ND		ug/kg	35.1	9.82	1	A
cis-Chlordane	ND		ug/kg	2.34	0.652	1	A
trans-Chlordane	ND		ug/kg	2.34	0.618	1	A
Chlordane	ND		ug/kg	15.2	6.20	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	642	Q	30-150	A
Decachlorobiphenyl	131		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 22:54
 Analyst: SL
 Percent Solids: 83%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	197	12.4	1	A
2,4,5-T	ND		ug/kg	197	6.09	1	A
2,4,5-TP (Silvex)	ND		ug/kg	197	5.23	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	108		30-150	A
DCAA	85		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:55
 Analyst: BM
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:41
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.339	1	A
Lindane	ND		ug/kg	0.721	0.322	1	A
Alpha-BHC	ND		ug/kg	0.721	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.656	1	A
Heptachlor	ND		ug/kg	0.866	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.610	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.974	1	A
Endrin	ND		ug/kg	0.721	0.296	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.757	1	A
Endrin ketone	ND		ug/kg	1.73	0.446	1	A
Dieldrin	ND		ug/kg	1.08	0.541	1	A
4,4'-DDE	ND		ug/kg	1.73	0.400	1	A
4,4'-DDD	ND		ug/kg	1.73	0.617	1	A
4,4'-DDT	ND		ug/kg	3.24	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.409	1	A
Endosulfan II	ND		ug/kg	1.73	0.578	1	A
Endosulfan sulfate	ND		ug/kg	0.721	0.343	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.09	1	A
cis-Chlordane	ND		ug/kg	2.16	0.603	1	A
trans-Chlordane	ND		ug/kg	2.16	0.571	1	A
Chlordane	ND		ug/kg	14.1	5.73	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	B
Decachlorobiphenyl	117		30-150	B
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	94		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 23:14
 Analyst: SL
 Percent Solids: 89%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	185	11.7	1	A
2,4,5-T	ND		ug/kg	185	5.74	1	A
2,4,5-TP (Silvex)	ND		ug/kg	185	4.93	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 13:07
 Analyst: BM
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:44
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.83	0.358	1	A
Lindane	ND		ug/kg	0.762	0.340	1	A
Alpha-BHC	ND		ug/kg	0.762	0.216	1	A
Beta-BHC	ND		ug/kg	1.83	0.693	1	A
Heptachlor	ND		ug/kg	0.914	0.410	1	A
Aldrin	ND		ug/kg	1.83	0.644	1	A
Heptachlor epoxide	ND		ug/kg	3.43	1.03	1	A
Endrin	ND		ug/kg	0.762	0.312	1	A
Endrin aldehyde	ND		ug/kg	2.28	0.800	1	A
Endrin ketone	ND		ug/kg	1.83	0.471	1	A
Dieldrin	ND		ug/kg	1.14	0.571	1	A
4,4'-DDE	ND		ug/kg	1.83	0.423	1	A
4,4'-DDD	ND		ug/kg	1.83	0.652	1	A
4,4'-DDT	ND		ug/kg	3.43	1.47	1	A
Endosulfan I	ND		ug/kg	1.83	0.432	1	A
Endosulfan II	ND		ug/kg	1.83	0.611	1	A
Endosulfan sulfate	ND		ug/kg	0.762	0.363	1	A
Methoxychlor	ND		ug/kg	3.43	1.07	1	A
Toxaphene	ND		ug/kg	34.3	9.60	1	A
cis-Chlordane	ND		ug/kg	2.28	0.637	1	A
trans-Chlordane	ND		ug/kg	2.28	0.603	1	A
Chlordane	ND		ug/kg	14.8	6.06	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	92		30-150	B
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	100		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 23:33
 Analyst: SL
 Percent Solids: 86%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	191	12.0	1	A
2,4,5-T	ND		ug/kg	191	5.91	1	A
2,4,5-TP (Silvex)	ND		ug/kg	191	5.07	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	86		30-150	A
DCAA	83		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 13:20
 Analyst: BM
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:44
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.348	1	A
Lindane	ND		ug/kg	0.740	0.330	1	A
Alpha-BHC	ND		ug/kg	0.740	0.210	1	A
Beta-BHC	ND		ug/kg	1.77	0.673	1	A
Heptachlor	ND		ug/kg	0.887	0.398	1	A
Aldrin	ND		ug/kg	1.77	0.625	1	A
Heptachlor epoxide	ND		ug/kg	3.33	0.998	1	A
Endrin	ND		ug/kg	0.740	0.303	1	A
Endrin aldehyde	ND		ug/kg	2.22	0.776	1	A
Endrin ketone	ND		ug/kg	1.77	0.457	1	A
Dieldrin	ND		ug/kg	1.11	0.555	1	A
4,4'-DDE	ND		ug/kg	1.77	0.410	1	A
4,4'-DDD	ND		ug/kg	1.77	0.633	1	A
4,4'-DDT	ND		ug/kg	3.33	1.43	1	A
Endosulfan I	ND		ug/kg	1.77	0.419	1	A
Endosulfan II	ND		ug/kg	1.77	0.593	1	A
Endosulfan sulfate	ND		ug/kg	0.740	0.352	1	A
Methoxychlor	ND		ug/kg	3.33	1.04	1	A
Toxaphene	ND		ug/kg	33.3	9.32	1	A
cis-Chlordane	ND		ug/kg	2.22	0.618	1	A
trans-Chlordane	ND		ug/kg	2.22	0.586	1	A
Chlordane	ND		ug/kg	14.4	5.88	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	107		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 23:53
 Analyst: SL
 Percent Solids: 86%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	190	12.0	1	A
2,4,5-T	ND		ug/kg	190	5.90	1	A
2,4,5-TP (Silvex)	ND		ug/kg	190	5.06	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/14/19 18:26
 Analyst: SL
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:44
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.86	0.365	1	A
Lindane	ND		ug/kg	0.776	0.347	1	A
Alpha-BHC	ND		ug/kg	0.776	0.220	1	A
Beta-BHC	ND		ug/kg	1.86	0.706	1	A
Heptachlor	ND		ug/kg	0.932	0.418	1	A
Aldrin	ND		ug/kg	1.86	0.656	1	A
Heptachlor epoxide	ND		ug/kg	3.49	1.05	1	A
Endrin	ND		ug/kg	0.776	0.318	1	A
Endrin aldehyde	ND		ug/kg	2.33	0.815	1	A
Endrin ketone	ND		ug/kg	1.86	0.480	1	A
Dieldrin	ND		ug/kg	1.16	0.582	1	A
4,4'-DDE	ND		ug/kg	1.86	0.431	1	A
4,4'-DDD	ND		ug/kg	1.86	0.664	1	A
4,4'-DDT	ND		ug/kg	3.49	1.50	1	A
Endosulfan I	ND		ug/kg	1.86	0.440	1	A
Endosulfan II	ND		ug/kg	1.86	0.623	1	A
Endosulfan sulfate	ND		ug/kg	0.776	0.370	1	A
Methoxychlor	ND		ug/kg	3.49	1.09	1	A
Toxaphene	ND		ug/kg	34.9	9.78	1	A
cis-Chlordane	ND		ug/kg	2.33	0.649	1	A
trans-Chlordane	ND		ug/kg	2.33	0.615	1	A
Chlordane	ND		ug/kg	15.1	6.17	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	115		30-150	B
Decachlorobiphenyl	155	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	133		30-150	A
Decachlorobiphenyl	148		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/11/19 00:13
 Analyst: SL
 Percent Solids: 82%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	200	12.6	1	A
2,4,5-T	ND		ug/kg	200	6.22	1	A
2,4,5-TP (Silvex)	ND		ug/kg	200	5.33	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	108		30-150	A
DCAA	100		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 13:46
 Analyst: BM
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:44
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.339	1	A
Lindane	ND		ug/kg	0.721	0.322	1	A
Alpha-BHC	ND		ug/kg	0.721	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.656	1	A
Heptachlor	ND		ug/kg	0.865	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.609	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.973	1	A
Endrin	ND		ug/kg	0.721	0.296	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.757	1	A
Endrin ketone	ND		ug/kg	1.73	0.445	1	A
Dieldrin	ND		ug/kg	1.08	0.541	1	A
4,4'-DDE	ND		ug/kg	1.73	0.400	1	A
4,4'-DDD	ND		ug/kg	1.73	0.617	1	A
4,4'-DDT	ND		ug/kg	3.24	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.409	1	A
Endosulfan II	ND		ug/kg	1.73	0.578	1	A
Endosulfan sulfate	ND		ug/kg	0.721	0.343	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.08	1	A
cis-Chlordane	ND		ug/kg	2.16	0.603	1	A
trans-Chlordane	ND		ug/kg	2.16	0.571	1	A
Chlordane	ND		ug/kg	14.0	5.73	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	107		30-150	B
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	99		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/11/19 00:52
 Analyst: SL
 Percent Solids: 90%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	B
2,4,5-T	ND		ug/kg	183	5.66	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	89		30-150	A
DCAA	82		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
Client ID: SODUP04_010719
Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 01/10/19 13:58
Analyst: BM
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 01/08/19 05:44
Cleanup Method: EPA 3620B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.87	0.367	1	A
Lindane	ND		ug/kg	0.780	0.349	1	A
Alpha-BHC	ND		ug/kg	0.780	0.222	1	A
Beta-BHC	ND		ug/kg	1.87	0.710	1	A
Heptachlor	ND		ug/kg	0.937	0.420	1	A
Aldrin	ND		ug/kg	1.87	0.660	1	A
Heptachlor epoxide	ND		ug/kg	3.51	1.05	1	A
Endrin	ND		ug/kg	0.780	0.320	1	A
Endrin aldehyde	ND		ug/kg	2.34	0.820	1	A
Endrin ketone	ND		ug/kg	1.87	0.482	1	A
Dieldrin	ND		ug/kg	1.17	0.585	1	A
4,4'-DDE	ND		ug/kg	1.87	0.433	1	A
4,4'-DDD	ND		ug/kg	1.87	0.668	1	A
4,4'-DDT	ND		ug/kg	3.51	1.51	1	A
Endosulfan I	ND		ug/kg	1.87	0.442	1	A
Endosulfan II	ND		ug/kg	1.87	0.626	1	A
Endosulfan sulfate	ND		ug/kg	0.780	0.372	1	A
Methoxychlor	ND		ug/kg	3.51	1.09	1	A
Toxaphene	ND		ug/kg	35.1	9.83	1	A
cis-Chlordane	ND		ug/kg	2.34	0.652	1	A
trans-Chlordane	ND		ug/kg	2.34	0.618	1	A
Chlordane	ND		ug/kg	15.2	6.20	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	104		30-150	B
Decachlorobiphenyl	87		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	84		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/11/19 01:12
 Analyst: SL
 Percent Solids: 83%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	199	12.6	1	A
2,4,5-T	ND		ug/kg	199	6.18	1	A
2,4,5-TP (Silvex)	ND		ug/kg	199	5.30	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	84		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
Client ID: SOFB03_010719
Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 01/10/19 13:53
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 20:16
 Analyst: SL

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 18:22

Methylation Date: 01/10/19 03:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	103		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/08/19 11:20
Analyst: SL

Extraction Method: EPA 3546
Extraction Date: 01/07/19 06:46
Cleanup Method: EPA 3620B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-06,08-09 Batch: WG1195277-1						
Delta-BHC	ND		ug/kg	1.52	0.297	A
Lindane	ND		ug/kg	0.633	0.283	A
Alpha-BHC	ND		ug/kg	0.633	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.576	A
Heptachlor	ND		ug/kg	0.759	0.340	A
Aldrin	ND		ug/kg	1.52	0.535	A
Heptachlor epoxide	ND		ug/kg	2.85	0.854	A
Endrin	ND		ug/kg	0.633	0.259	A
Endrin aldehyde	ND		ug/kg	1.90	0.664	A
Endrin ketone	ND		ug/kg	1.52	0.391	A
Dieldrin	ND		ug/kg	0.949	0.475	A
4,4'-DDE	ND		ug/kg	1.52	0.351	A
4,4'-DDD	ND		ug/kg	1.52	0.542	A
4,4'-DDT	ND		ug/kg	2.85	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.359	A
Endosulfan II	ND		ug/kg	1.52	0.508	A
Endosulfan sulfate	ND		ug/kg	0.633	0.301	A
Methoxychlor	ND		ug/kg	2.85	0.886	A
Toxaphene	ND		ug/kg	28.5	7.97	A
cis-Chlordane	ND		ug/kg	1.90	0.529	A
trans-Chlordane	ND		ug/kg	1.90	0.501	A
Chlordane	ND		ug/kg	12.3	5.03	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
Analytical Date: 01/08/19 11:20
Analyst: SL

Extraction Method: EPA 3546
Extraction Date: 01/07/19 06:46
Cleanup Method: EPA 3620B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-06,08-09 Batch: WG1195277-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	109		30-150	B
Decachlorobiphenyl	112		30-150	B
2,4,5,6-Tetrachloro-m-xylene	118		30-150	A
Decachlorobiphenyl	143		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/10/19 12:25
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG1195638-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:25
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG1195638-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 01/10/19 21:15
 Analyst: SL

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Methylation Date: 01/09/19 23:01

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1195880-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.02	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.30	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	85		30-150	A
DCAA	73		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/10/19 11:42
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 18:22

Methylation Date: 01/10/19 03:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 11 Batch: WG1196169-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/11/19 14:44
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 01/07/19 06:46
Cleanup Method: EPA 3620B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 07 Batch: WG1196837-1						
Delta-BHC	ND		ug/kg	1.52	0.297	A
Lindane	ND		ug/kg	0.633	0.283	A
Alpha-BHC	ND		ug/kg	0.633	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.576	A
Heptachlor	ND		ug/kg	0.759	0.340	A
Aldrin	ND		ug/kg	1.52	0.535	A
Heptachlor epoxide	ND		ug/kg	2.85	0.854	A
Endrin	ND		ug/kg	0.633	0.259	A
Endrin aldehyde	ND		ug/kg	1.90	0.664	A
Endrin ketone	ND		ug/kg	1.52	0.391	A
Dieldrin	ND		ug/kg	0.949	0.475	A
4,4'-DDE	ND		ug/kg	1.52	0.351	A
4,4'-DDD	ND		ug/kg	1.52	0.542	A
4,4'-DDT	ND		ug/kg	2.85	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.359	A
Endosulfan II	ND		ug/kg	1.52	0.508	A
Endosulfan sulfate	ND		ug/kg	0.633	0.301	A
Methoxychlor	ND		ug/kg	2.85	0.886	A
Toxaphene	ND		ug/kg	28.5	7.97	A
cis-Chlordane	ND		ug/kg	1.90	0.529	A
trans-Chlordane	ND		ug/kg	1.90	0.501	A
Chlordane	ND		ug/kg	12.3	5.03	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 01/11/19 14:44
 Analyst: BM

Extraction Method: EPA 3546
 Extraction Date: 01/07/19 06:46
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 07 Batch: WG1196837-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	123		30-150	B
Decachlorobiphenyl	152	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	131		30-150	A
Decachlorobiphenyl	154	Q	30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06,08-09 Batch: WG1195277-2 WG1195277-3									
Delta-BHC	114		101		30-150	12		30	A
Lindane	117		100		30-150	16		30	A
Alpha-BHC	126		101		30-150	22		30	A
Beta-BHC	103		92		30-150	11		30	A
Heptachlor	122		104		30-150	16		30	A
Aldrin	114		95		30-150	18		30	A
Heptachlor epoxide	116		104		30-150	11		30	A
Endrin	130		116		30-150	11		30	A
Endrin aldehyde	69		67		30-150	3		30	A
Endrin ketone	91		92		30-150	1		30	A
Dieldrin	135		117		30-150	14		30	A
4,4'-DDE	112		88		30-150	24		30	A
4,4'-DDD	123		109		30-150	12		30	A
4,4'-DDT	131		115		30-150	13		30	A
Endosulfan I	111		97		30-150	13		30	A
Endosulfan II	112		101		30-150	10		30	A
Endosulfan sulfate	60		70		30-150	15		30	A
Methoxychlor	129		115		30-150	11		30	A
cis-Chlordane	97		85		30-150	13		30	A
trans-Chlordane	79		76		30-150	4		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06,08-09 Batch: WG1195277-2 WG1195277-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	115		100		30-150	B
Decachlorobiphenyl	128		113		30-150	B
2,4,5,6-Tetrachloro-m-xylene	107		92		30-150	A
Decachlorobiphenyl	141		123		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1195638-2 WG1195638-3									
Delta-BHC	72		83		30-150	14		20	A
Lindane	72		78		30-150	7		20	A
Alpha-BHC	75		82		30-150	9		20	A
Beta-BHC	76		88		30-150	14		20	A
Heptachlor	72		78		30-150	8		20	A
Aldrin	71		76		30-150	8		20	A
Heptachlor epoxide	77		84		30-150	9		20	A
Endrin	75		83		30-150	11		20	A
Endrin aldehyde	59		62		30-150	5		20	A
Endrin ketone	69		82		30-150	17		20	A
Dieldrin	77		85		30-150	9		20	A
4,4'-DDE	74		82		30-150	10		20	A
4,4'-DDD	76		79		30-150	4		20	A
4,4'-DDT	71		75		30-150	6		20	A
Endosulfan I	71		78		30-150	10		20	A
Endosulfan II	71		76		30-150	7		20	A
Endosulfan sulfate	65		78		30-150	19		20	A
Methoxychlor	71		83		30-150	16		20	A
cis-Chlordane	64		69		30-150	7		20	A
trans-Chlordane	69		75		30-150	9		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1195638-2 WG1195638-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	72		81		30-150	A
Decachlorobiphenyl	36		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		81		30-150	B
Decachlorobiphenyl	36		44		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1195880-2 WG1195880-3									
2,4-D	105		117		30-150	11		30	A
2,4,5-T	90		89		30-150	1		30	A
2,4,5-TP (Silvex)	87		86		30-150	1		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	86		89		30-150	A
DCAA	95		92		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1196169-2 WG1196169-3									
2,4-D	100		101		30-150	1		25	A
2,4,5-T	100		98		30-150	2		25	A
2,4,5-TP (Silvex)	99		100		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	101		100		30-150	A
DCAA	97		96		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 07 Batch: WG1196837-2 WG1196837-3									
Delta-BHC	112		101		30-150	10		30	A
Lindane	119		103		30-150	14		30	A
Alpha-BHC	130		110		30-150	17		30	A
Beta-BHC	108		96		30-150	12		30	A
Heptachlor	124		107		30-150	15		30	A
Aldrin	123		107		30-150	14		30	A
Heptachlor epoxide	112		108		30-150	4		30	A
Endrin	132		123		30-150	7		30	A
Endrin aldehyde	69		72		30-150	4		30	A
Endrin ketone	93		97		30-150	4		30	A
Dieldrin	124		117		30-150	6		30	A
4,4'-DDE	127		103		30-150	21		30	A
4,4'-DDD	127		117		30-150	8		30	A
4,4'-DDT	132		122		30-150	8		30	A
Endosulfan I	117		107		30-150	9		30	A
Endosulfan II	115		108		30-150	6		30	A
Endosulfan sulfate	42		54		30-150	25		30	A
Methoxychlor	130		124		30-150	5		30	A
cis-Chlordane	103		96		30-150	7		30	A
trans-Chlordane	82		84		30-150	2		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 07 Batch: WG1196837-2 WG1196837-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	115		104		30-150	B
Decachlorobiphenyl	165	Q	155	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	120		104		30-150	A
Decachlorobiphenyl	148		138		30-150	A

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195880-4 WG1195880-5 QC Sample: L1900707-03 Client ID: RB13_22-24													
2,4-D	ND	195	157J	81		152J	77		30-150	3		30	A
2,4,5-T	ND	195	148J	76		143J	73		30-150	3		30	A
2,4,5-TP (Silvex)	ND	195	146J	75		145J	74		30-150	1		30	A

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
DCAA	104		99		30-150	A
DCAA	93		88		30-150	B



METALS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-01

Date Collected: 01/07/19 10:45

Client ID: RB13_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8550		mg/kg	8.88	2.40	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Antimony, Total	0.915	J	mg/kg	4.44	0.338	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Arsenic, Total	4.10		mg/kg	0.888	0.185	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Barium, Total	42.8		mg/kg	0.888	0.154	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Beryllium, Total	0.302	J	mg/kg	0.444	0.029	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Cadmium, Total	0.178	J	mg/kg	0.888	0.087	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Calcium, Total	2430		mg/kg	8.88	3.11	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Chromium, Total	12.0		mg/kg	0.888	0.085	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Cobalt, Total	9.94		mg/kg	1.78	0.147	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Copper, Total	19.8		mg/kg	0.888	0.229	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Iron, Total	15000		mg/kg	4.44	0.802	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Lead, Total	76.2		mg/kg	4.44	0.238	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Magnesium, Total	2730		mg/kg	8.88	1.37	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Manganese, Total	256		mg/kg	0.888	0.141	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Mercury, Total	0.468		mg/kg	0.073	0.016	1	01/09/19 05:00	01/09/19 22:16	EPA 7471B	1,7471B	EA
Nickel, Total	11.7		mg/kg	2.22	0.215	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Potassium, Total	530		mg/kg	222	12.8	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Selenium, Total	0.249	J	mg/kg	1.78	0.229	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.888	0.251	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Sodium, Total	332		mg/kg	178	2.80	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.78	0.280	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Vanadium, Total	14.9		mg/kg	0.888	0.180	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Zinc, Total	120		mg/kg	4.44	0.260	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.93	0.93	1		01/09/19 20:14	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-02

Date Collected: 01/07/19 11:00

Client ID: RB13_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9480		mg/kg	9.07	2.45	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.53	0.344	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Arsenic, Total	5.15		mg/kg	0.907	0.188	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Barium, Total	117		mg/kg	0.907	0.158	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Beryllium, Total	0.281	J	mg/kg	0.453	0.030	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.907	0.089	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Calcium, Total	3010		mg/kg	9.07	3.17	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Chromium, Total	22.4		mg/kg	0.907	0.087	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Cobalt, Total	7.46		mg/kg	1.81	0.150	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Copper, Total	14.0		mg/kg	0.907	0.234	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Iron, Total	18900		mg/kg	4.53	0.819	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Lead, Total	37.8		mg/kg	4.53	0.243	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Magnesium, Total	4360		mg/kg	9.07	1.40	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Manganese, Total	563		mg/kg	0.907	0.144	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Mercury, Total	0.066	J	mg/kg	0.075	0.016	1	01/09/19 05:00	01/09/19 22:18	EPA 7471B	1,7471B	EA
Nickel, Total	11.5		mg/kg	2.27	0.219	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Potassium, Total	516		mg/kg	227	13.0	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Selenium, Total	0.408	J	mg/kg	1.81	0.234	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.907	0.256	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Sodium, Total	152	J	mg/kg	181	2.86	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.81	0.286	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Vanadium, Total	27.1		mg/kg	0.907	0.184	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Zinc, Total	56.0		mg/kg	4.53	0.266	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	22		mg/kg	0.95	0.95	1		01/09/19 20:18	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-03

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3160		mg/kg	9.49	2.56	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.74	0.360	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Arsenic, Total	0.987		mg/kg	0.949	0.197	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Barium, Total	9.92		mg/kg	0.949	0.165	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Beryllium, Total	0.133	J	mg/kg	0.474	0.031	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.949	0.093	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Calcium, Total	855		mg/kg	9.49	3.32	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Chromium, Total	6.86		mg/kg	0.949	0.091	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Cobalt, Total	2.34		mg/kg	1.90	0.157	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Copper, Total	4.71		mg/kg	0.949	0.245	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Iron, Total	6690		mg/kg	4.74	0.857	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Lead, Total	9.56		mg/kg	4.74	0.254	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Magnesium, Total	1420		mg/kg	9.49	1.46	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Manganese, Total	66.9		mg/kg	0.949	0.151	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.083	0.018	1	01/10/19 12:43	01/10/19 21:30	EPA 7471B	1,7471B	EA
Nickel, Total	5.44		mg/kg	2.37	0.230	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Potassium, Total	396		mg/kg	237	13.7	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.90	0.245	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.949	0.268	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Sodium, Total	50.1	J	mg/kg	190	2.99	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.90	0.299	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Vanadium, Total	8.76		mg/kg	0.949	0.192	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Zinc, Total	14.7		mg/kg	4.74	0.278	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	6.9		mg/kg	0.96	0.96	1		01/11/19 08:49	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04

Date Collected: 01/07/19 10:55

Client ID: RB13_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4760		mg/kg	8.49	2.29	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.24	0.322	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Arsenic, Total	0.603	J	mg/kg	0.849	0.176	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Barium, Total	35.7		mg/kg	0.849	0.148	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.424	0.028	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.849	0.083	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Calcium, Total	23400		mg/kg	8.49	2.97	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Chromium, Total	7.04		mg/kg	0.849	0.082	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Cobalt, Total	4.64		mg/kg	1.70	0.141	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Copper, Total	13.8		mg/kg	0.849	0.219	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Iron, Total	9510		mg/kg	4.24	0.766	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Lead, Total	2.76	J	mg/kg	4.24	0.228	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Magnesium, Total	16800		mg/kg	8.49	1.31	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Manganese, Total	179		mg/kg	0.849	0.135	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.072	0.015	1	01/09/19 05:00	01/09/19 22:21	EPA 7471B	1,7471B	EA
Nickel, Total	7.42		mg/kg	2.12	0.205	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Potassium, Total	1820		mg/kg	212	12.2	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Selenium, Total	0.518	J	mg/kg	1.70	0.219	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.849	0.240	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Sodium, Total	236		mg/kg	170	2.67	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.70	0.267	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Vanadium, Total	14.8		mg/kg	0.849	0.172	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Zinc, Total	26.0		mg/kg	4.24	0.249	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.0		mg/kg	0.90	0.90	1		01/09/19 20:26	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-05

Date Collected: 01/07/19 12:20

Client ID: RB14_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7870		mg/kg	9.15	2.47	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Antimony, Total	0.348	J	mg/kg	4.57	0.348	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Arsenic, Total	4.92		mg/kg	0.915	0.190	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Barium, Total	61.0		mg/kg	0.915	0.159	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Beryllium, Total	0.183	J	mg/kg	0.457	0.030	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Cadmium, Total	0.183	J	mg/kg	0.915	0.090	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Calcium, Total	33100		mg/kg	9.15	3.20	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Chromium, Total	18.9		mg/kg	0.915	0.088	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Cobalt, Total	5.76		mg/kg	1.83	0.152	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Copper, Total	24.4		mg/kg	0.915	0.236	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Iron, Total	13800		mg/kg	4.57	0.826	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Lead, Total	169		mg/kg	4.57	0.245	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Magnesium, Total	2710		mg/kg	9.15	1.41	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Manganese, Total	242		mg/kg	0.915	0.145	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Mercury, Total	0.186		mg/kg	0.075	0.016	1	01/09/19 05:00	01/09/19 22:23	EPA 7471B	1,7471B	EA
Nickel, Total	11.0		mg/kg	2.29	0.221	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Potassium, Total	1000		mg/kg	229	13.2	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Selenium, Total	0.430	J	mg/kg	1.83	0.236	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.915	0.259	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Sodium, Total	272		mg/kg	183	2.88	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.83	0.288	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Vanadium, Total	16.1		mg/kg	0.915	0.186	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Zinc, Total	119		mg/kg	4.57	0.268	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	19	J	mg/kg	0.93	0.93	1		01/09/19 20:30	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-06

Date Collected: 01/07/19 12:25

Client ID: RB14_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3360		mg/kg	9.00	2.43	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.50	0.342	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Arsenic, Total	0.846	J	mg/kg	0.900	0.187	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Barium, Total	11.5		mg/kg	0.900	0.157	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Beryllium, Total	0.126	J	mg/kg	0.450	0.030	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.900	0.088	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Calcium, Total	572		mg/kg	9.00	3.15	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Chromium, Total	7.34		mg/kg	0.900	0.086	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Cobalt, Total	2.85		mg/kg	1.80	0.149	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Copper, Total	4.34		mg/kg	0.900	0.232	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Iron, Total	7990		mg/kg	4.50	0.813	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Lead, Total	5.19		mg/kg	4.50	0.241	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Magnesium, Total	1340		mg/kg	9.00	1.39	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Manganese, Total	171		mg/kg	0.900	0.143	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.073	0.016	1	01/09/19 05:00	01/09/19 22:28	EPA 7471B	1,7471B	EA
Nickel, Total	5.40		mg/kg	2.25	0.218	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Potassium, Total	321		mg/kg	225	13.0	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.80	0.232	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.900	0.255	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Sodium, Total	35.6	J	mg/kg	180	2.84	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.80	0.284	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Vanadium, Total	10.3		mg/kg	0.900	0.183	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Zinc, Total	14.8		mg/kg	4.50	0.264	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.3		mg/kg	0.93	0.93	1		01/09/19 20:34	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-07

Date Collected: 01/07/19 12:30

Client ID: RB14_23-25

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4380		mg/kg	9.26	2.50	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.63	0.352	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Arsenic, Total	0.852	J	mg/kg	0.926	0.193	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Barium, Total	12.2		mg/kg	0.926	0.161	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Beryllium, Total	0.139	J	mg/kg	0.463	0.031	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.926	0.091	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Calcium, Total	414		mg/kg	9.26	3.24	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Chromium, Total	8.44		mg/kg	0.926	0.089	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Cobalt, Total	4.06		mg/kg	1.85	0.154	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Copper, Total	7.55		mg/kg	0.926	0.239	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Iron, Total	9340		mg/kg	4.63	0.836	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Lead, Total	11.3		mg/kg	4.63	0.248	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Magnesium, Total	1650		mg/kg	9.26	1.43	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Manganese, Total	78.8		mg/kg	0.926	0.147	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.076	0.016	1	01/09/19 05:00	01/09/19 22:30	EPA 7471B	1,7471B	EA
Nickel, Total	6.96		mg/kg	2.32	0.224	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Potassium, Total	493		mg/kg	232	13.3	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.85	0.239	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.926	0.262	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Sodium, Total	55.6	J	mg/kg	185	2.92	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.85	0.292	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Vanadium, Total	11.1		mg/kg	0.926	0.188	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Zinc, Total	16.9		mg/kg	4.63	0.271	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	8.4		mg/kg	0.97	0.97	1		01/09/19 20:39	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-08

Date Collected: 01/07/19 12:35

Client ID: RB14_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7220		mg/kg	8.51	2.30	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Antimony, Total	3.31	J	mg/kg	4.26	0.324	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Arsenic, Total	0.613	J	mg/kg	0.851	0.177	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Barium, Total	46.7		mg/kg	0.851	0.148	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.426	0.028	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.851	0.083	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Calcium, Total	10400		mg/kg	8.51	2.98	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Chromium, Total	21.4		mg/kg	0.851	0.082	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Cobalt, Total	11.2		mg/kg	1.70	0.141	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Copper, Total	9.33		mg/kg	0.851	0.220	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Iron, Total	11600		mg/kg	4.26	0.769	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Lead, Total	2.40	J	mg/kg	4.26	0.228	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Magnesium, Total	10500		mg/kg	8.51	1.31	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Manganese, Total	140		mg/kg	0.851	0.135	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.071	0.015	1	01/09/19 05:00	01/09/19 22:31	EPA 7471B	1,7471B	EA
Nickel, Total	17.0		mg/kg	2.13	0.206	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Potassium, Total	2480		mg/kg	213	12.3	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.70	0.220	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.851	0.241	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Sodium, Total	321		mg/kg	170	2.68	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.70	0.268	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Vanadium, Total	26.4		mg/kg	0.851	0.173	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Zinc, Total	32.0		mg/kg	4.26	0.249	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	21		mg/kg	0.89	0.89	1		01/09/19 20:43	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-09

Date Collected: 01/07/19 00:00

Client ID: SODUP04_010719

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4800		mg/kg	9.28	2.50	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.64	0.352	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Arsenic, Total	0.835	J	mg/kg	0.928	0.193	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Barium, Total	13.2		mg/kg	0.928	0.161	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Beryllium, Total	0.167	J	mg/kg	0.464	0.031	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.928	0.091	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Calcium, Total	482		mg/kg	9.28	3.25	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Chromium, Total	10.2		mg/kg	0.928	0.089	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Cobalt, Total	4.53		mg/kg	1.86	0.154	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Copper, Total	8.60		mg/kg	0.928	0.239	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Iron, Total	9820		mg/kg	4.64	0.838	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Lead, Total	7.53		mg/kg	4.64	0.249	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Magnesium, Total	1850		mg/kg	9.28	1.43	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Manganese, Total	159		mg/kg	0.928	0.148	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.075	0.016	1	01/09/19 05:00	01/09/19 22:33	EPA 7471B	1,7471B	EA
Nickel, Total	8.05		mg/kg	2.32	0.224	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Potassium, Total	487		mg/kg	232	13.4	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.86	0.239	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.928	0.262	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Sodium, Total	56.5	J	mg/kg	186	2.92	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.86	0.292	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Vanadium, Total	12.7		mg/kg	0.928	0.188	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Zinc, Total	19.7		mg/kg	4.64	0.272	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	10		mg/kg	0.96	0.96	1		01/09/19 20:47	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.100	0.032	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Antimony, Total	0.009	J	mg/l	0.050	0.007	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Arsenic, Total	ND		mg/l	0.005	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Barium, Total	0.002	J	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Beryllium, Total	ND		mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Cadmium, Total	ND		mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Calcium, Total	ND		mg/l	0.100	0.035	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Chromium, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Cobalt, Total	ND		mg/l	0.020	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Copper, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Iron, Total	ND		mg/l	0.050	0.009	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Lead, Total	ND		mg/l	0.010	0.003	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Magnesium, Total	ND		mg/l	0.100	0.015	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Manganese, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/08/19 10:55	01/08/19 18:43	EPA 7470A	1,7470A	MG
Nickel, Total	ND		mg/l	0.025	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Potassium, Total	ND		mg/l	2.50	0.237	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Selenium, Total	ND		mg/l	0.010	0.004	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Silver, Total	ND		mg/l	0.007	0.003	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Sodium, Total	ND		mg/l	2.00	0.120	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Thallium, Total	ND		mg/l	0.020	0.003	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Vanadium, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Zinc, Total	ND		mg/l	0.050	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/09/19 21:48	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 11 Batch: WG1195683-1									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	01/08/19 10:55	01/08/19 18:06	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 01-02,04-09 Batch: WG1195823-1										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Antimony, Total	ND	mg/kg	2.00	0.152	1	01/08/19 20:10	01/09/19 16:17	1,6010D	AB	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Barium, Total	ND	mg/kg	0.400	0.070	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Calcium, Total	ND	mg/kg	4.00	1.40	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Chromium, Total	ND	mg/kg	0.400	0.038	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Cobalt, Total	ND	mg/kg	0.800	0.066	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Copper, Total	ND	mg/kg	0.400	0.103	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Iron, Total	ND	mg/kg	2.00	0.361	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Lead, Total	ND	mg/kg	2.00	0.107	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Manganese, Total	ND	mg/kg	0.400	0.064	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Nickel, Total	ND	mg/kg	1.00	0.097	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Potassium, Total	ND	mg/kg	100	5.76	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Selenium, Total	0.128	J	mg/kg	0.800	0.103	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB
Silver, Total	ND	mg/kg	0.400	0.113	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Sodium, Total	1.64	J	mg/kg	80.0	1.26	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB
Thallium, Total	ND	mg/kg	0.800	0.126	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Zinc, Total	ND	mg/kg	2.00	0.117	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02,04-09 Batch: WG1195894-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	01/09/19 05:00	01/09/19 21:55	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 11 Batch: WG1196054-1									
Aluminum, Total	ND	mg/l	0.100	0.032	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Antimony, Total	ND	mg/l	0.050	0.007	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Arsenic, Total	ND	mg/l	0.005	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Barium, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Beryllium, Total	ND	mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Cadmium, Total	ND	mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Calcium, Total	ND	mg/l	0.100	0.035	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Chromium, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Cobalt, Total	ND	mg/l	0.020	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Copper, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Iron, Total	ND	mg/l	0.050	0.009	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Lead, Total	ND	mg/l	0.010	0.003	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Magnesium, Total	ND	mg/l	0.100	0.015	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Manganese, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Nickel, Total	ND	mg/l	0.025	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Potassium, Total	ND	mg/l	2.50	0.237	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Selenium, Total	ND	mg/l	0.010	0.004	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Silver, Total	ND	mg/l	0.007	0.003	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Sodium, Total	ND	mg/l	2.00	0.120	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Thallium, Total	ND	mg/l	0.020	0.003	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Vanadium, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis Batch Quality Control

Zinc, Total	ND	mg/l	0.050	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
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Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03 Batch: WG1196430-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	01/10/19 12:43	01/10/19 21:22	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03 Batch: WG1196431-1									
Aluminum, Total	ND	mg/kg	4.00	1.08	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Antimony, Total	ND	mg/kg	2.00	0.152	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Arsenic, Total	ND	mg/kg	0.400	0.083	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Barium, Total	ND	mg/kg	0.400	0.070	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Beryllium, Total	ND	mg/kg	0.200	0.013	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Cadmium, Total	ND	mg/kg	0.400	0.039	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Calcium, Total	ND	mg/kg	4.00	1.40	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Chromium, Total	ND	mg/kg	0.400	0.038	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Cobalt, Total	ND	mg/kg	0.800	0.066	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Copper, Total	ND	mg/kg	0.400	0.103	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Iron, Total	ND	mg/kg	2.00	0.361	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Lead, Total	ND	mg/kg	2.00	0.107	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Magnesium, Total	ND	mg/kg	4.00	0.616	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Manganese, Total	ND	mg/kg	0.400	0.064	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Nickel, Total	ND	mg/kg	1.00	0.097	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Potassium, Total	ND	mg/kg	100	5.76	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Selenium, Total	ND	mg/kg	0.800	0.103	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Silver, Total	ND	mg/kg	0.400	0.113	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Sodium, Total	ND	mg/kg	80.0	1.26	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19

Method Blank Analysis Batch Quality Control

Thallium, Total	ND	mg/kg	0.800	0.126	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Vanadium, Total	ND	mg/kg	0.400	0.081	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Zinc, Total	ND	mg/kg	2.00	0.117	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1195683-2								
Mercury, Total	89		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 Batch: WG1195823-2 SRM Lot Number: D101-540					
Aluminum, Total	74	-	50-151	-	
Antimony, Total	162	-	3-196	-	
Arsenic, Total	106	-	83-117	-	
Barium, Total	97	-	83-118	-	
Beryllium, Total	94	-	83-117	-	
Cadmium, Total	96	-	83-117	-	
Calcium, Total	94	-	81-119	-	
Chromium, Total	94	-	81-118	-	
Cobalt, Total	95	-	84-116	-	
Copper, Total	96	-	83-116	-	
Iron, Total	98	-	62-138	-	
Lead, Total	95	-	83-117	-	
Magnesium, Total	84	-	76-124	-	
Manganese, Total	95	-	82-118	-	
Nickel, Total	94	-	82-117	-	
Potassium, Total	87	-	71-130	-	
Selenium, Total	103	-	79-121	-	
Silver, Total	100	-	80-120	-	
Sodium, Total	100	-	72-127	-	
Thallium, Total	95	-	81-119	-	
Vanadium, Total	96	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 Batch: WG1195823-2 SRM Lot Number: D101-540					
Zinc, Total	97	-	81-119	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 Batch: WG1195894-2 SRM Lot Number: D101-540					
Mercury, Total	77	-	65-135	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1196054-2					
Aluminum, Total	96	-	80-120	-	
Antimony, Total	95	-	80-120	-	
Arsenic, Total	106	-	80-120	-	
Barium, Total	93	-	80-120	-	
Beryllium, Total	93	-	80-120	-	
Cadmium, Total	102	-	80-120	-	
Calcium, Total	98	-	80-120	-	
Chromium, Total	95	-	80-120	-	
Cobalt, Total	94	-	80-120	-	
Copper, Total	94	-	80-120	-	
Iron, Total	98	-	80-120	-	
Lead, Total	100	-	80-120	-	
Magnesium, Total	101	-	80-120	-	
Manganese, Total	91	-	80-120	-	
Nickel, Total	95	-	80-120	-	
Potassium, Total	94	-	80-120	-	
Selenium, Total	114	-	80-120	-	
Silver, Total	101	-	80-120	-	
Sodium, Total	96	-	80-120	-	
Thallium, Total	102	-	80-120	-	
Vanadium, Total	98	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1196054-2					
Zinc, Total	101	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1196430-2 SRM Lot Number: D101-540					
Mercury, Total	85	-	65-135	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1196431-2 SRM Lot Number: D101-540					
Aluminum, Total	69	-	50-151	-	
Antimony, Total	141	-	3-196	-	
Arsenic, Total	94	-	83-117	-	
Barium, Total	90	-	83-118	-	
Beryllium, Total	92	-	83-117	-	
Cadmium, Total	89	-	83-117	-	
Calcium, Total	90	-	81-119	-	
Chromium, Total	90	-	81-118	-	
Cobalt, Total	90	-	84-116	-	
Copper, Total	92	-	83-116	-	
Iron, Total	86	-	62-138	-	
Lead, Total	86	-	83-117	-	
Magnesium, Total	85	-	76-124	-	
Manganese, Total	87	-	82-118	-	
Nickel, Total	90	-	82-117	-	
Potassium, Total	83	-	71-130	-	
Selenium, Total	92	-	79-121	-	
Silver, Total	91	-	80-120	-	
Sodium, Total	97	-	72-127	-	
Thallium, Total	90	-	81-119	-	
Vanadium, Total	91	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1196431-2 SRM Lot Number: D101-540					
Zinc, Total	90	-	81-119	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1195683-3 QC Sample: L1900487-09 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00499	100		-	-		75-125	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195823-3 QC Sample: L1900622-01 Client ID: MS Sample									
Aluminum, Total	3970	181	4480	281	Q	-	75-125	-	20
Antimony, Total	1.47J	45.3	41.0	90		-	75-125	-	20
Arsenic, Total	5.00	10.9	16.1	102		-	75-125	-	20
Barium, Total	211	181	407	108		-	75-125	-	20
Beryllium, Total	0.174J	4.53	3.90	86		-	75-125	-	20
Cadmium, Total	1.14	4.62	5.02	84		-	75-125	-	20
Calcium, Total	45300	906	43200	0	Q	-	75-125	-	20
Chromium, Total	13.3	18.1	32.7	107		-	75-125	-	20
Cobalt, Total	3.41	45.3	41.0	83		-	75-125	-	20
Copper, Total	13.4	22.6	33.8	90		-	75-125	-	20
Iron, Total	8430	90.6	7600	0	Q	-	75-125	-	20
Lead, Total	1890	46.2	1200	0	Q	-	75-125	-	20
Magnesium, Total	1820	906	2640	90		-	75-125	-	20
Manganese, Total	216	45.3	230	31	Q	-	75-125	-	20
Nickel, Total	10.3	45.3	46.5	80		-	75-125	-	20
Potassium, Total	878	906	1780	100		-	75-125	-	20
Selenium, Total	0.432J	10.9	11.2	103		-	75-125	-	20
Silver, Total	ND	27.2	29.0	107		-	75-125	-	20
Sodium, Total	605	906	1430	91		-	75-125	-	20
Thallium, Total	ND	10.9	7.89	72	Q	-	75-125	-	20
Vanadium, Total	20.6	45.3	57.1	80		-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195823-3 QC Sample: L1900622-01 Client ID: MS Sample									
Zinc, Total	669	45.3	575	0	Q	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195894-3 QC Sample: L1900686-14 Client ID: MS Sample									
Mercury, Total	ND	0.139	0.150	108	-	-	80-120	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-3 QC Sample: L1900487-09 Client ID: MS Sample									
Aluminum, Total	ND	2	1.95	98	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.473	95	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.125	104	-	-	75-125	-	20
Barium, Total	ND	2	1.90	95	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.048	96	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.052	102	-	-	75-125	-	20
Calcium, Total	0.066J	10	9.95	100	-	-	75-125	-	20
Chromium, Total	ND	0.2	0.190	95	-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.468	94	-	-	75-125	-	20
Copper, Total	ND	0.25	0.234	94	-	-	75-125	-	20
Iron, Total	0.020J	1	1.02	102	-	-	75-125	-	20
Lead, Total	ND	0.51	0.508	100	-	-	75-125	-	20
Magnesium, Total	0.033J	10	10.5	105	-	-	75-125	-	20
Manganese, Total	ND	0.5	0.460	92	-	-	75-125	-	20
Nickel, Total	ND	0.5	0.472	94	-	-	75-125	-	20
Potassium, Total	ND	10	9.69	97	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.134	112	-	-	75-125	-	20
Silver, Total	ND	0.05	0.050	100	-	-	75-125	-	20
Sodium, Total	0.191J	10	9.93	99	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.120	100	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.482	96	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-3 QC Sample: L1900487-09 Client ID: MS Sample									
Zinc, Total	0.007J	0.5	0.508	102	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1196430-3 WG1196430-4 QC Sample: L1900707-03 Client ID: RB13_22-24									
Mercury, Total	ND	0.162	0.174	107	0.186	110	80-120	7	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits			
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1196431-3 WG1196431-4 QC Sample: L1900707-03 Client ID: RB13_22-24												
Aluminum, Total	3160	186	3940	420	Q	5820	1450	Q	75-125	39	Q	20
Antimony, Total	ND	46.5	40.5	87		38.2	84		75-125	6		20
Arsenic, Total	0.987	11.2	12.3	101		12.1	101		75-125	2		20
Barium, Total	9.92	186	183	93		184	95		75-125	1		20
Beryllium, Total	0.133J	4.65	4.65	100		4.64	102		75-125	0		20
Cadmium, Total	ND	4.74	4.54	96		4.39	94		75-125	3		20
Calcium, Total	855	930	1700	91		1830	107		75-125	7		20
Chromium, Total	6.86	18.6	23.8	91		27.1	111		75-125	13		20
Cobalt, Total	2.34	46.5	43.8	89		42.8	88		75-125	2		20
Copper, Total	4.71	23.2	26.5	94		28.8	105		75-125	8		20
Iron, Total	6690	93	7210	559	Q	9290	2840	Q	75-125	25	Q	20
Lead, Total	9.56	47.4	52.7	91		53.3	94		75-125	1		20
Magnesium, Total	1420	930	2420	108		2910	163	Q	75-125	18		20
Manganese, Total	66.9	46.5	113	99		136	151	Q	75-125	18		20
Nickel, Total	5.44	46.5	47.2	90		47.5	92		75-125	1		20
Potassium, Total	396	930	1330	100		1550	126	Q	75-125	15		20
Selenium, Total	ND	11.2	11.0	99		10.4	95		75-125	6		20
Silver, Total	ND	27.9	29.4	105		29.5	108		75-125	0		20
Sodium, Total	50.1J	930	996	107		991	108		75-125	1		20
Thallium, Total	ND	11.2	9.93	89		9.46	86		75-125	5		20
Vanadium, Total	8.76	46.5	53.6	96		55.9	103		75-125	4		20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1196431-3 WG1196431-4 QC Sample: L1900707-03 Client ID: RB13_22-24									
Zinc, Total	14.7	46.5	59.4	96	61.7	103	75-125	4	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1195683-4 QC Sample: L1900487-09 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195823-4 QC Sample: L1900622-01 Client ID: DUP Sample						
Lead, Total	1890	656	mg/kg	97	Q	20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195894-4 QC Sample: L1900686-14 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-4 QC Sample: L1900487-09 Client ID: DUP Sample					
Aluminum, Total	ND	ND	mg/l	NC	20
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	ND	0.003J	mg/l	NC	20
Barium, Total	ND	0.002J	mg/l	NC	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	0.066J	0.065J	mg/l	NC	20
Chromium, Total	ND	ND	mg/l	NC	20
Cobalt, Total	ND	ND	mg/l	NC	20
Copper, Total	ND	ND	mg/l	NC	20
Lead, Total	ND	ND	mg/l	NC	20
Magnesium, Total	0.033J	0.028J	mg/l	NC	20
Manganese, Total	ND	ND	mg/l	NC	20
Nickel, Total	ND	ND	mg/l	NC	20
Potassium, Total	ND	ND	mg/l	NC	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	0.191J	0.289J	mg/l	NC	20
Thallium, Total	ND	ND	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-4 QC Sample: L1900487-09 Client ID: DUP Sample					
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.007J	0.006J	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-4 QC Sample: L1900487-09 Client ID: DUP Sample					
Iron, Total	0.020J	0.015J	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
Client ID: RB13_0-2
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.6		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/08/19 10:15	01/09/19 11:33	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.934	0.187	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-02

Date Collected: 01/07/19 11:00

Client ID: RB13_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.0		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	01/08/19 10:15	01/09/19 11:34	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.952	0.190	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-03

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.0		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	01/08/19 10:15	01/09/19 11:35	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.964	0.193	1	01/10/19 15:30	01/11/19 08:49	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
Client ID: RB13_33-35
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.7		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	01/08/19 10:15	01/09/19 11:39	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.902	0.180	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-05

Date Collected: 01/07/19 12:20

Client ID: RB14_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.8		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	01/08/19 10:15	01/09/19 11:40	1,9010C/9012B	LH
Chromium, Hexavalent	0.221	J	mg/kg	0.932	0.186	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
Client ID: RB14_18-20
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.8		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.24	1	01/08/19 10:15	01/09/19 11:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.932	0.186	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07

Date Collected: 01/07/19 12:30

Client ID: RB14_23-25

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.3		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.26	1	01/08/19 10:15	01/09/19 11:44	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.972	0.194	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
Client ID: RB14_33-35
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.2		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/08/19 10:15	01/09/19 11:45	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.887	0.177	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
Client ID: SODUP04_010719
Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.3		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	01/08/19 10:15	01/09/19 11:46	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.960	0.192	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/09/19 14:35	01/10/19 13:55	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/08/19 03:45	01/08/19 04:28	1,7196A	MA



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1195574-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/08/19 03:45	01/08/19 04:21	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1195617-1										
Cyanide, Total	ND		mg/kg	0.91	0.19	1	01/08/19 10:15	01/09/19 11:10	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-02,04-09 Batch: WG1195861-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1196095-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/09/19 02:35	01/10/19 13:19	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG1196593-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	01/10/19 15:30	01/11/19 08:49	1,7196A	NH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1195574-2								
Chromium, Hexavalent	92		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1195617-2 WG1195617-3								
Cyanide, Total	60	Q	62	Q	80-120	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-09 Batch: WG1195861-2								
Chromium, Hexavalent	99		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1196095-2 WG1196095-3								
Cyanide, Total	103		101		85-115	2		20
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG1196593-2								
Chromium, Hexavalent	95		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1195574-4 QC Sample: L1900707-11 Client ID: SOFB03_010719												
Chromium, Hexavalent	ND	0.1	0.097	97	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195617-4 WG1195617-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
Cyanide, Total	ND	12	11	92	11	93	93	75-125	0	0	0	35
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195861-4 QC Sample: L1900707-04 Client ID: RB13_33-35												
Chromium, Hexavalent	ND	1140	1230	108	-	-	-	-	75-125	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1196095-4 WG1196095-5 QC Sample: L1900885-11 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.197	98	0.194	97	97	80-120	2	2	2	20
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG1196593-4 WG1196593-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
Chromium, Hexavalent	ND	1180	1130	95	1150	94	94	75-125	2	2	2	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1195574-3 QC Sample: L1900707-11 Client ID: SOFB03_010719						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195696-1 QC Sample: L1900707-03 Client ID: RB13_22-24						
Solids, Total	83.0	78.4	%	6		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195861-6 QC Sample: L1900707-04 Client ID: RB13_33-35						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG1196593-7 QC Sample: L1900707-03 Client ID: RB13_22-24						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

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Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-01A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-01B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-01C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-01D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-01F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-01G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-02A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-02B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-02C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-02D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-02F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-02G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days



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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-03A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-03A1	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-03A2	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-03B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03B1	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03B2	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03C1	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03C2	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-03D1	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-03D2	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-03E1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-03E2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-03F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-03F1	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-03F2	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-03G	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-03G1	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-03G2	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-04A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-04B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-04C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-04D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-04F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-04G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-05A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-05B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-05C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-05D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-05F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-05G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days



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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-06A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-06B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-06C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-06D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-06F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-06G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-07A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-07B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-07C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-07D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-07E	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TS(7),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-08A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-08B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-08C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-08D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-08F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-08G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-09A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-09B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-09C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-09D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-09E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-09F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-09G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-10A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-10B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-11A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-11B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-11C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-11D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-11E	Plastic 250ml NaOH preserved	A	>12	>12	2.2	Y	Absent		TCN-9010(14)
L1900707-11F	Plastic 500ml unpreserved	A	NA		2.2	Y	Absent		HEXCR-7196(1)
L1900707-11G	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8081(7)
L1900707-11H	Amber 120ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8081(7)
L1900707-11I	Amber 120ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8082-LVI(7)
L1900707-11J	Amber 120ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8082-LVI(7)
L1900707-11K	Amber 250ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-11L	Amber 250ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1900707-11M	Amber 1000ml unpreserved	A	NA		2.2	Y	Absent		HERB-APA(7)
L1900707-11N	Amber 1000ml unpreserved	B	7	7	3.8	Y	Absent		HERB-APA(7)

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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page		Date Rec'd in Lab	1/7/19	ALPHA Job # L1900707										
		1 of 2														
Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3286	Project Information Project Name: Gerard Ave. + E. 146th St. Project Location: Bronx NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input checked="" type="checkbox"/> ASP-A No: 30 <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #											
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:										
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.		Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)										
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide	Sample Specific Comments	Total Bottle	
		Date	Time													
00707-01	RB13-0-2	1/7/19	1045	Soil	JL	X	X	X	X	X	X	X	X			
-02	RB13-18-20	↓	1100	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓			
-03	RB13-22-24	↓	1050	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓			
-04	RB13-33-35	↓	1055	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓			
-05	RB14-0-2	↓	1220	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓			
-06	RB14-18-20	↓	1225	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓			
-07	RB14-23-25	↓	1230	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓			
-08	RB14-33-35	↓	1235	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓			
-09	SODUP04-010719	↓	-	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓			
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative						Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)		
		Relinquished By:		Date/Time		Received By:		Date/Time								
		[Signature]		1/7/19 - 1515		Daniel Jackson III		1/7 1515								
		[Signature]		1/7 1100		D. Santos AAL		1/7/19 1400								
		[Signature]		1/7/19 2225		Wendy Morency		1/7/19 2225								

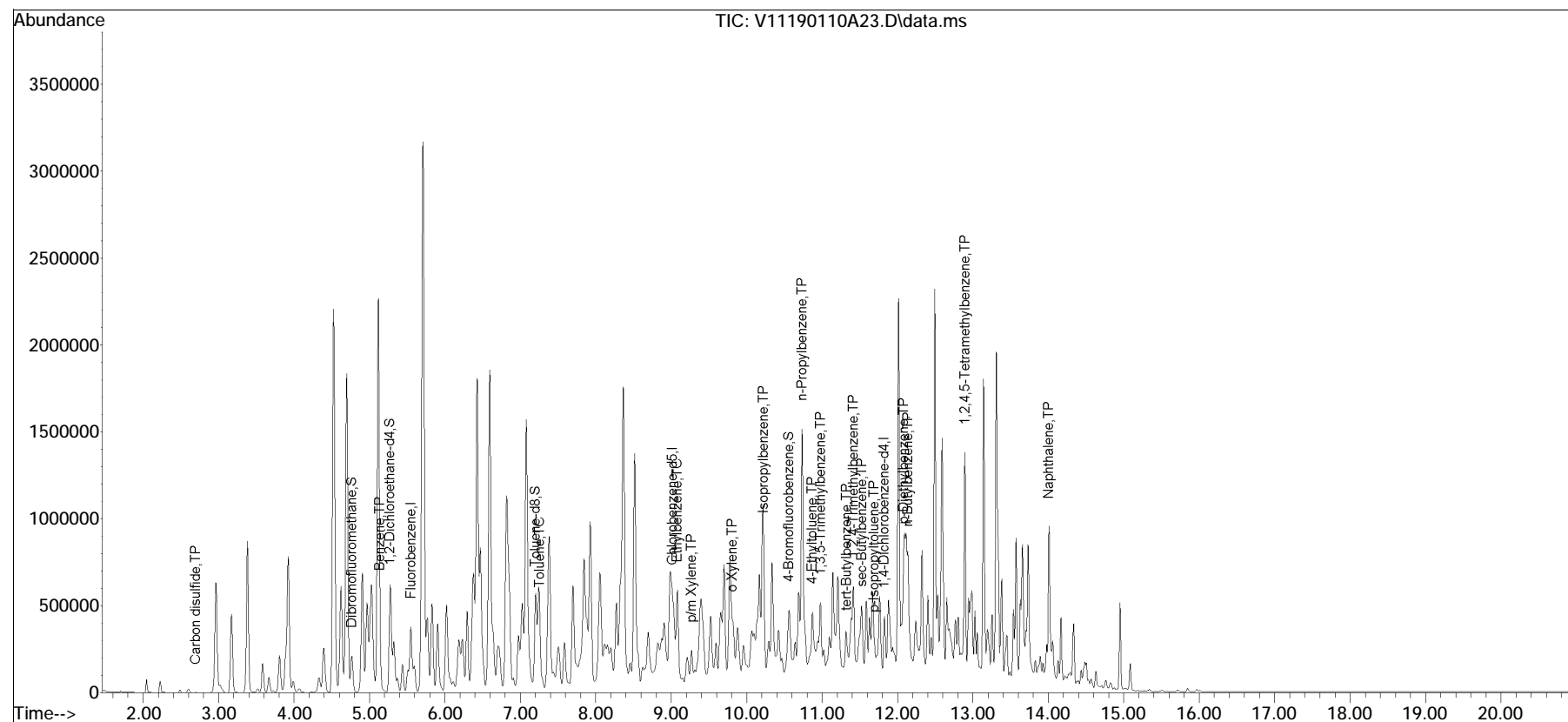
 <p>NEW YORK CHAIN OF CUSTODY</p> <p>Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193</p> <p>Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288</p>	<p>Service Centers</p> <p>Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105</p>	<p>Page 2 of 2</p>	<p>Date Rec'd in Lab 1/7/19</p>	<p>ALPHA Job # L1900707</p>																								
	<p>Project Information</p> <p>Project Name: Gerard Ave. + E. 146th St. Project Location: Bronx NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/></p>		<p>Deliverables</p> <p><input checked="" type="checkbox"/> ASP-A WQS <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other</p>		<p>Billing Information</p> <p><input checked="" type="checkbox"/> Same as Client Info PO #</p>																							
<p>Client Information</p> <p>Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com</p>		<p>Regulatory Requirement</p> <p><input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge</p>		<p>Disposal Site Information</p> <p>Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:</p>																								
<p>Turn-Around Time</p> <p>Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:</p>		<p>ANALYSIS</p> <table border="1"> <tr> <th>Part 375/TCL VOCs</th> <th>Part 375/TCL SVOCs</th> <th>Part 375/TCL PCBs</th> <th>Pesticides</th> <th>Herbicides</th> <th>TAL Metals</th> <th>Hexavalent Chromium</th> <th>Total Cyanide</th> </tr> <tr> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> </table>		Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide	X								X	X	X	X	X	X	X	X	<p>Sample Filtration</p> <p><input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)</p>
Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide																					
X																												
X	X	X	X	X	X	X	X																					
<p>These samples have been previously analyzed by Alpha <input type="checkbox"/></p> <p>Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.</p>		<p>ALPHA Lab ID (Lab Use Only)</p>		<p>Sample ID</p>																								
<p>Collection</p> <p>Date Time</p>		<p>Sample Matrix</p>		<p>Sampler's Initials</p>																								
00707 -10	SOTB06-010719	1/7/19	-	AQ	JL																							
-11	SGFB03-010719	↓	1400	AQ	JD	X	X																					
<p>Preservative Code: A = None B = HCl C = HNO₃ D = H₂SO₄ E = NaOH F = MeOH G = NaHSO₄ H = Na₂S₂O₃ K/E = Zn Ac/NaOH O = Other</p>		<p>Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle</p>		<p>Westboro: Certification No: MA935 Mansfield: Certification No: MA015</p>		<p>Container Type</p>																						
<p>Relinquished By:</p>		<p>Date/Time</p>		<p>Received By:</p>		<p>Date/Time</p>																						
<p>JL</p>		<p>1/7/19 1515</p>		<p>Reneik Jackson</p>		<p>1/7 1515</p>																						
<p>D. Santas</p>		<p>1/7/19 1100</p>		<p>D. Santas</p>		<p>1/7/19 1900</p>																						
<p>D. Santas</p>		<p>1/7/19 2225</p>		<p>Windy Murray</p>		<p>1/7/19 2225</p>																						
<p>Form No: 01-25 HC (rev. 30-Sept-2013)</p>		<p>Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)</p>																										

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2019\190110A\
 Data File : V11190110A23.D
 Acq On : 10 Jan 2019 04:21 pm
 Operator : VOA111:AD
 Sample : 11900707-03D,31H,6.00,5,0.020,,a
 Misc : WG1196507,ICAL15386
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 10 17:04:10 2019
 Quant Method : I:\VOLATILES\VOA111\2019\190110A\V111_190108N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Jan 09 10:10:31 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90110A\V11190110A01.D•

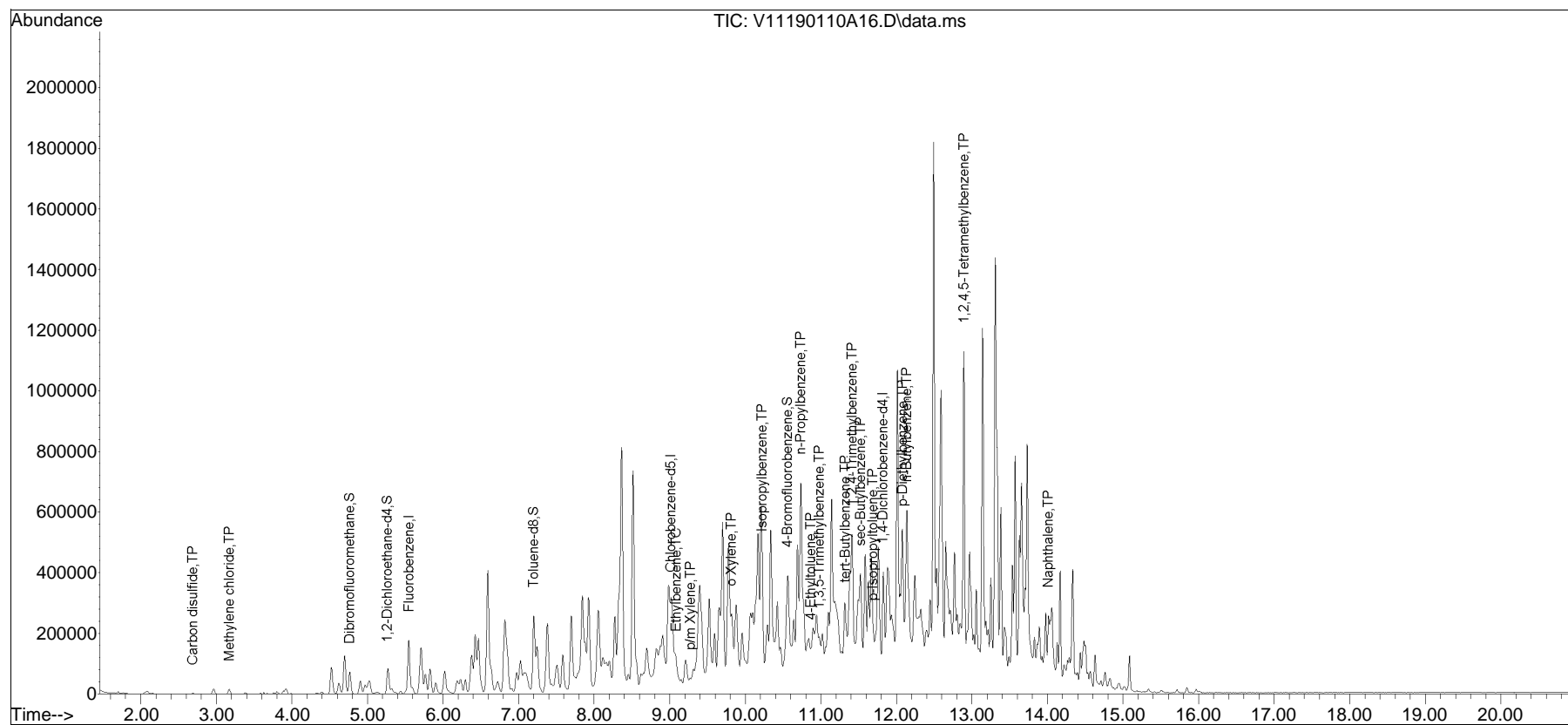


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2019\190110A\
Data File : V11190110A16.D
Acq On : 10 Jan 2019 01:18 pm
Operator : VOA111:AD
Sample : 11900707-06D,31H,5.66,5,0.040,,a
Misc : WG1196507,ICAL15386
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 10 14:43:29 2019
Quant Method : I:\VOLATILES\VOA111\2019\190110A\V111_190108N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jan 09 10:10:31 2019
Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90110A\V11190110A01.D•

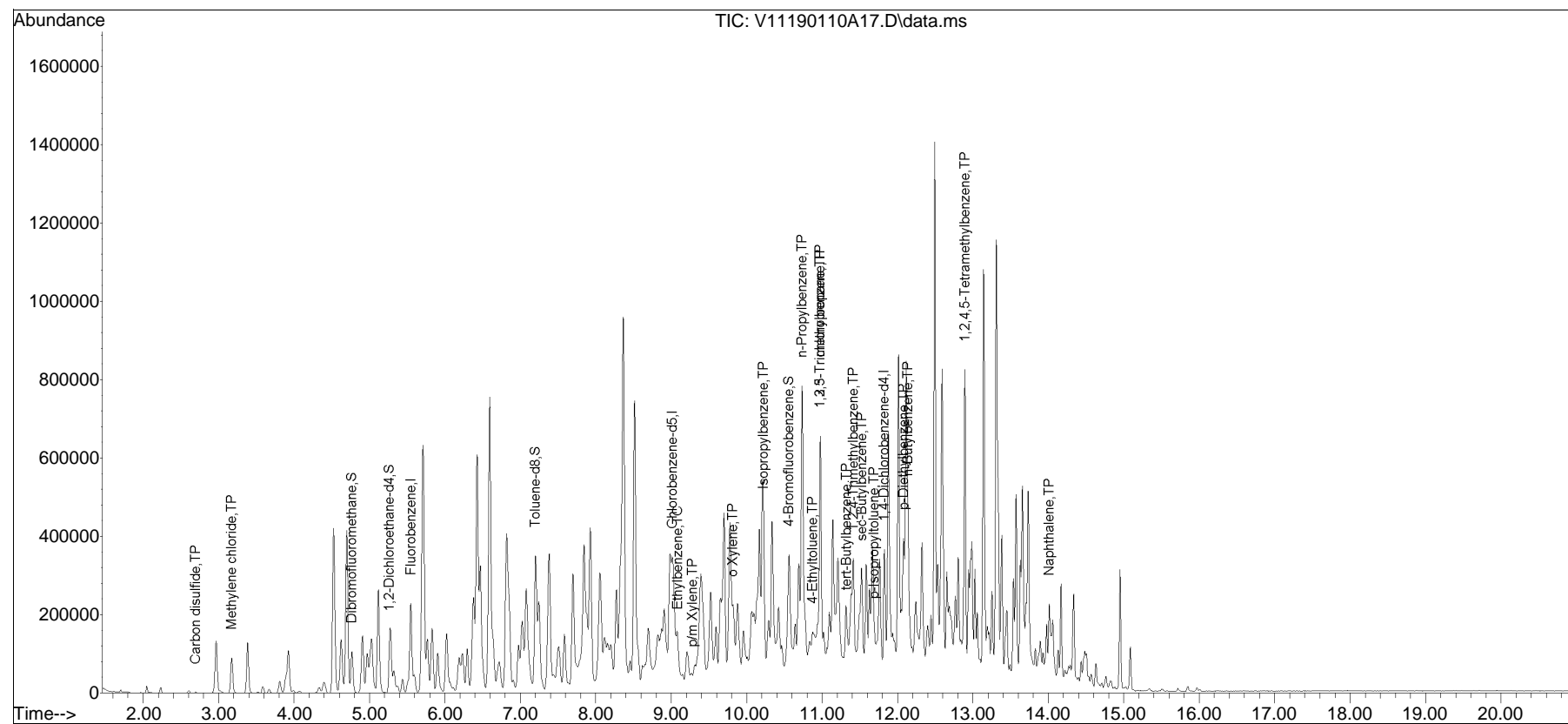


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2019\190110A\
 Data File : V11190110A17.D
 Acq On : 10 Jan 2019 01:44 pm
 Operator : VOA111:AD
 Sample : 11900707-07D,31H,5.92,5,0.010,,a
 Misc : WG1196507,ICAL15386
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 10 14:45:32 2019
 Quant Method : I:\VOLATILES\VOA111\2019\190110A\V111_190108N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Jan 09 10:10:31 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90110A\V11190110A01.D•

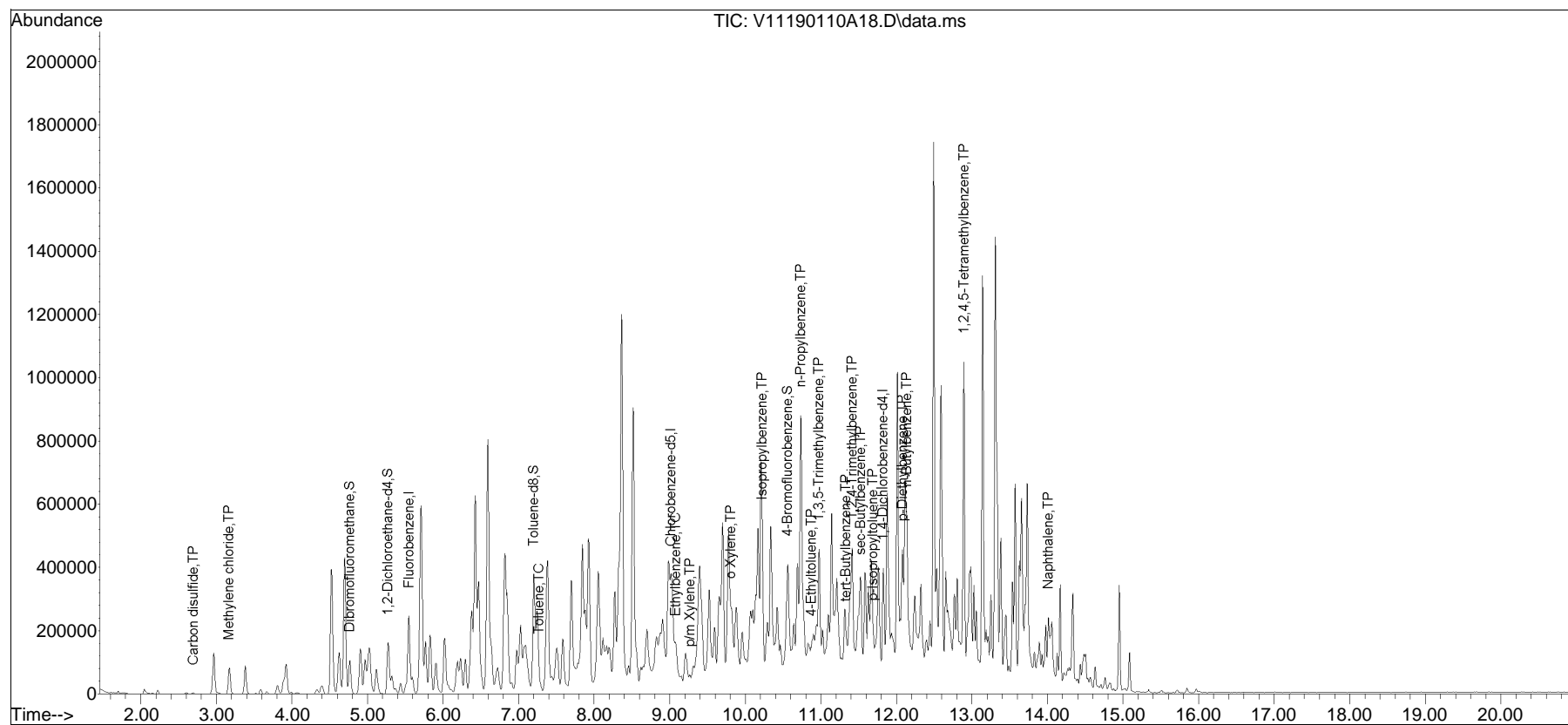


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2019\190110A\
 Data File : V11190110A18.D
 Acq On : 10 Jan 2019 02:10 pm
 Operator : VOA111:AD
 Sample : 11900707-09D,31H,6.11,5,0.025,,a
 Misc : WG1196507,ICAL15386
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 10 14:48:18 2019
 Quant Method : I:\VOLATILES\VOA111\2019\190110A\V111_190108N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Jan 09 10:10:31 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90110A\V11190110A01.D•





ANALYTICAL REPORT

Lab Number:	L1900879
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/18/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900879-01	RB10_0-2	SOIL	BRONX, NY	01/08/19 11:30	01/08/19
L1900879-02	RB10_18-20	SOIL	BRONX, NY	01/08/19 11:35	01/08/19
L1900879-03	RB10_33-35	SOIL	BRONX, NY	01/08/19 11:40	01/08/19
L1900879-04	RB15_0-2	SOIL	BRONX, NY	01/08/19 13:00	01/08/19
L1900879-05	RB15_18-20	SOIL	BRONX, NY	01/08/19 13:05	01/08/19
L1900879-06	RB15_23-25	SOIL	BRONX, NY	01/08/19 13:15	01/08/19
L1900879-07	RB15_28-30	SOIL	BRONX, NY	01/08/19 13:10	01/08/19
L1900879-08	RB16_0-2	SOIL	BRONX, NY	01/08/19 10:40	01/08/19
L1900879-09	RB16_13-15	SOIL	BRONX, NY	01/08/19 10:45	01/08/19
L1900879-10	RB16_18-20	SOIL	BRONX, NY	01/08/19 10:50	01/08/19
L1900879-11	SODUP05_010819	SOIL	BRONX, NY	01/08/19 00:00	01/08/19
L1900879-12	SOFB04_010819	WATER	BRONX, NY	01/08/19 10:00	01/08/19
L1900879-13	SOTB07_010819	WATER	BRONX, NY	01/08/19 00:00	01/08/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Semivolatile Organics

L1900879-01, -04, and -09: The sample has elevated detection limits due to the dilution required by the sample matrix.

The WG1196039-4/-5 MS/MSD recoveries, performed on L1900879-03, are below the acceptance criteria for benzoic acid (0%/0%) due to the concentration of this compound falling below the reported detection limit.

Pesticides

L1900879-06: The surrogate recovery is outside the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (181%); however, the sample was not re-extracted due to coelution with obvious interferences.

Total Metals

L1900879-01 through -11: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1196160-3/-4 MS/MSD recoveries for aluminum (214%/190%) and iron (53%/349%), performed on L1900879-03, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1196160-7/-8 MS/MSD recoveries for aluminum (197%/296%), iron (MS at 0%) and manganese (0%/0%), performed on L1900879-07, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1196160-7/-8 MS/MSD recoveries, performed on L1900879-07, are outside the acceptance criteria for thallium (73%/73%). A post digestion spike was performed and yielded unacceptable recoveries for thallium

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Case Narrative (continued)

(76%). The serial dilution recovery was not applicable; therefore, this element fails the matrix test and the result reported in the native sample should be considered estimated.

Cyanide, Total

The WG1196013-2/-3 LCS/LCSD recoveries (50%/75%), associated with L1900879-01 through -06 and -08 through -11, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits.

The results of the original analyses are reported. In addition, the WG1196013-2/-3 LCS/LCSD RPD (39%) is above the acceptance criteria.

The WG1196064-2/-3 LCS/LCSD RPD (39%), associated with L1900879-07, is above the acceptance criteria.

The WG1196064-5 MSD recovery (39%), performed on L1900879-07, is outside the acceptance criteria; however, the associated LCS recovery is within criteria. No further action was taken. In addition, the WG1196064-4/-5 MS/MSD RPD (89%) is above the acceptance criteria.

Hexavalent Chromium

The WG1196213-2 LCS recovery (79%), associated with L1900879-01 through -06 and -08 through -11, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1196215-2 LCS recovery (79%), associated with L1900879-07, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/18/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01
 Client ID: RB10_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 23:10
 Analyst: JC
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.5	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.90	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.90	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.90	0.11	1
Dibromochloromethane	ND		ug/kg	0.90	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.90	0.24	1
Tetrachloroethene	ND		ug/kg	0.45	0.18	1
Chlorobenzene	ND		ug/kg	0.45	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.63	1
1,2-Dichloroethane	ND		ug/kg	0.90	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.45	0.15	1
Bromodichloromethane	ND		ug/kg	0.45	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.45	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.45	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.45	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.45	0.15	1
Benzene	ND		ug/kg	0.45	0.15	1
Toluene	ND		ug/kg	0.90	0.49	1
Ethylbenzene	ND		ug/kg	0.90	0.13	1
Chloromethane	ND		ug/kg	3.6	0.84	1
Bromomethane	ND		ug/kg	1.8	0.53	1
Vinyl chloride	ND		ug/kg	0.90	0.30	1
Chloroethane	ND		ug/kg	1.8	0.41	1
1,1-Dichloroethene	ND		ug/kg	0.90	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.12	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-01

Date Collected: 01/08/19 11:30

Client ID: RB10_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.45	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.51	1
o-Xylene	ND		ug/kg	0.90	0.26	1
Xylenes, Total	ND		ug/kg	0.90	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.90	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.90	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.22	1
Styrene	ND		ug/kg	0.90	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.0	0.83	1
Acetone	ND		ug/kg	9.0	4.4	1
Carbon disulfide	ND		ug/kg	9.0	4.1	1
2-Butanone	ND		ug/kg	9.0	2.0	1
Vinyl acetate	ND		ug/kg	9.0	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	9.0	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.12	1
2-Hexanone	ND		ug/kg	9.0	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.90	0.25	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.45	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.90	0.15	1
sec-Butylbenzene	ND		ug/kg	0.90	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.90	1
Hexachlorobutadiene	ND		ug/kg	3.6	0.15	1
Isopropylbenzene	ND		ug/kg	0.90	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.90	0.10	1
Naphthalene	ND		ug/kg	3.6	0.59	1
Acrylonitrile	ND		ug/kg	3.6	1.0	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01
Client ID: RB10_0-2
Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.90	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1
1,4-Dioxane	ND		ug/kg	90	32.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.35	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.5	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
 Client ID: RB10_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 00:52
 Analyst: MV
 Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	490	220	1
1,1-Dichloroethane	ND		ug/kg	98	14.	1
Chloroform	ND		ug/kg	150	14.	1
Carbon tetrachloride	ND		ug/kg	98	22.	1
1,2-Dichloropropane	ND		ug/kg	98	12.	1
Dibromochloromethane	ND		ug/kg	98	14.	1
1,1,2-Trichloroethane	ND		ug/kg	98	26.	1
Tetrachloroethene	ND		ug/kg	49	19.	1
Chlorobenzene	ND		ug/kg	49	12.	1
Trichlorofluoromethane	ND		ug/kg	390	68.	1
1,2-Dichloroethane	ND		ug/kg	98	25.	1
1,1,1-Trichloroethane	ND		ug/kg	49	16.	1
Bromodichloromethane	ND		ug/kg	49	11.	1
trans-1,3-Dichloropropene	ND		ug/kg	98	27.	1
cis-1,3-Dichloropropene	ND		ug/kg	49	15.	1
1,3-Dichloropropene, Total	ND		ug/kg	49	15.	1
1,1-Dichloropropene	ND		ug/kg	49	16.	1
Bromoform	ND		ug/kg	390	24.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	49	16.	1
Benzene	9500		ug/kg	49	16.	1
Toluene	8500		ug/kg	98	53.	1
Ethylbenzene	2600		ug/kg	98	14.	1
Chloromethane	ND		ug/kg	390	91.	1
Bromomethane	ND		ug/kg	200	57.	1
Vinyl chloride	ND		ug/kg	98	33.	1
Chloroethane	ND		ug/kg	200	44.	1
1,1-Dichloroethene	ND		ug/kg	98	23.	1
trans-1,2-Dichloroethene	ND		ug/kg	150	13.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
Client ID: RB10_18-20
Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	49	13.	1
1,2-Dichlorobenzene	ND		ug/kg	200	14.	1
1,3-Dichlorobenzene	ND		ug/kg	200	14.	1
1,4-Dichlorobenzene	ND		ug/kg	200	17.	1
Methyl tert butyl ether	ND		ug/kg	200	20.	1
p/m-Xylene	6800		ug/kg	200	55.	1
o-Xylene	840		ug/kg	98	28.	1
Xylenes, Total	7600		ug/kg	98	28.	1
cis-1,2-Dichloroethene	ND		ug/kg	98	17.	1
1,2-Dichloroethene, Total	ND		ug/kg	98	13.	1
Dibromomethane	ND		ug/kg	200	23.	1
Styrene	ND		ug/kg	98	19.	1
Dichlorodifluoromethane	ND		ug/kg	980	90.	1
Acetone	9300		ug/kg	980	470	1
Carbon disulfide	ND		ug/kg	980	450	1
2-Butanone	ND		ug/kg	980	220	1
Vinyl acetate	ND		ug/kg	980	210	1
4-Methyl-2-pentanone	ND		ug/kg	980	120	1
1,2,3-Trichloropropane	ND		ug/kg	200	12.	1
2-Hexanone	ND		ug/kg	980	120	1
Bromochloromethane	ND		ug/kg	200	20.	1
2,2-Dichloropropane	ND		ug/kg	200	20.	1
1,2-Dibromoethane	ND		ug/kg	98	27.	1
1,3-Dichloropropane	ND		ug/kg	200	16.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	49	13.	1
Bromobenzene	ND		ug/kg	200	14.	1
n-Butylbenzene	1600		ug/kg	98	16.	1
sec-Butylbenzene	1400		ug/kg	98	14.	1
tert-Butylbenzene	130	J	ug/kg	200	12.	1
o-Chlorotoluene	ND		ug/kg	200	19.	1
p-Chlorotoluene	ND		ug/kg	200	10.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	290	98.	1
Hexachlorobutadiene	ND		ug/kg	390	16.	1
Isopropylbenzene	2800		ug/kg	98	11.	1
p-Isopropyltoluene	56	J	ug/kg	98	11.	1
Naphthalene	590		ug/kg	390	64.	1
Acrylonitrile	ND		ug/kg	390	110	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
 Client ID: RB10_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	6700		ug/kg	98	17.	1
1,2,3-Trichlorobenzene	ND		ug/kg	200	32.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	27.	1
1,3,5-Trimethylbenzene	180	J	ug/kg	200	19.	1
1,2,4-Trimethylbenzene	900		ug/kg	200	33.	1
1,4-Dioxane	ND		ug/kg	9800	3400	1
p-Diethylbenzene	2200		ug/kg	200	17.	1
p-Ethyltoluene	1200		ug/kg	200	38.	1
1,2,4,5-Tetramethylbenzene	5700		ug/kg	200	19.	1
Ethyl ether	ND		ug/kg	200	33.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	490	140	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	128		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
 Client ID: RB10_33-35
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 23:35
 Analyst: JC
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.72	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.17	1
Bromodichloromethane	ND		ug/kg	0.52	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.52	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.52	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.52	0.16	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.56	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.97	1
Bromomethane	ND		ug/kg	2.1	0.60	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.47	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-03

Date Collected: 01/08/19 11:40

Client ID: RB10_33-35

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.58	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.95	1
Acetone	ND		ug/kg	10	5.0	1
Carbon disulfide	ND		ug/kg	10	4.7	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.52	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.2	0.18	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.2	0.67	1
Acrylonitrile	ND		ug/kg	4.2	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
Client ID: RB10_33-35
Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	100	36.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.18	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	93		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-04
 Client ID: RB15_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 01:18
 Analyst: MV
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	370	170	1
1,1-Dichloroethane	ND		ug/kg	74	11.	1
Chloroform	ND		ug/kg	110	10.	1
Carbon tetrachloride	ND		ug/kg	74	17.	1
1,2-Dichloropropane	ND		ug/kg	74	9.2	1
Dibromochloromethane	ND		ug/kg	74	10.	1
1,1,2-Trichloroethane	ND		ug/kg	74	20.	1
Tetrachloroethene	1100		ug/kg	37	14.	1
Chlorobenzene	ND		ug/kg	37	9.4	1
Trichlorofluoromethane	ND		ug/kg	290	51.	1
1,2-Dichloroethane	ND		ug/kg	74	19.	1
1,1,1-Trichloroethane	ND		ug/kg	37	12.	1
Bromodichloromethane	ND		ug/kg	37	8.0	1
trans-1,3-Dichloropropene	ND		ug/kg	74	20.	1
cis-1,3-Dichloropropene	ND		ug/kg	37	12.	1
1,3-Dichloropropene, Total	ND		ug/kg	37	12.	1
1,1-Dichloropropene	ND		ug/kg	37	12.	1
Bromoform	ND		ug/kg	290	18.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	37	12.	1
Benzene	130		ug/kg	37	12.	1
Toluene	1900		ug/kg	74	40.	1
Ethylbenzene	ND		ug/kg	74	10.	1
Chloromethane	ND		ug/kg	290	69.	1
Bromomethane	ND		ug/kg	150	43.	1
Vinyl chloride	ND		ug/kg	74	25.	1
Chloroethane	ND		ug/kg	150	33.	1
1,1-Dichloroethene	ND		ug/kg	74	18.	1
trans-1,2-Dichloroethene	ND		ug/kg	110	10.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-04

Date Collected: 01/08/19 13:00

Client ID: RB15_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	37	10.	1
1,2-Dichlorobenzene	ND		ug/kg	150	11.	1
1,3-Dichlorobenzene	ND		ug/kg	150	11.	1
1,4-Dichlorobenzene	ND		ug/kg	150	12.	1
Methyl tert butyl ether	ND		ug/kg	150	15.	1
p/m-Xylene	ND		ug/kg	150	41.	1
o-Xylene	ND		ug/kg	74	21.	1
Xylenes, Total	ND		ug/kg	74	21.	1
cis-1,2-Dichloroethene	ND		ug/kg	74	13.	1
1,2-Dichloroethene, Total	ND		ug/kg	74	10.	1
Dibromomethane	ND		ug/kg	150	18.	1
Styrene	ND		ug/kg	74	14.	1
Dichlorodifluoromethane	ND		ug/kg	740	67.	1
Acetone	ND		ug/kg	740	350	1
Carbon disulfide	ND		ug/kg	740	340	1
2-Butanone	ND		ug/kg	740	160	1
Vinyl acetate	ND		ug/kg	740	160	1
4-Methyl-2-pentanone	ND		ug/kg	740	94.	1
1,2,3-Trichloropropane	ND		ug/kg	150	9.4	1
2-Hexanone	ND		ug/kg	740	87.	1
Bromochloromethane	ND		ug/kg	150	15.	1
2,2-Dichloropropane	ND		ug/kg	150	15.	1
1,2-Dibromoethane	ND		ug/kg	74	20.	1
1,3-Dichloropropane	ND		ug/kg	150	12.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	37	9.7	1
Bromobenzene	ND		ug/kg	150	11.	1
n-Butylbenzene	ND		ug/kg	74	12.	1
sec-Butylbenzene	ND		ug/kg	74	11.	1
tert-Butylbenzene	ND		ug/kg	150	8.7	1
o-Chlorotoluene	ND		ug/kg	150	14.	1
p-Chlorotoluene	ND		ug/kg	150	8.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	220	73.	1
Hexachlorobutadiene	ND		ug/kg	290	12.	1
Isopropylbenzene	ND		ug/kg	74	8.0	1
p-Isopropyltoluene	ND		ug/kg	74	8.0	1
Naphthalene	ND		ug/kg	290	48.	1
Acrylonitrile	ND		ug/kg	290	85.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-04
 Client ID: RB15_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	ND		ug/kg	74	12.	1
1,2,3-Trichlorobenzene	ND		ug/kg	150	24.	1
1,2,4-Trichlorobenzene	ND		ug/kg	150	20.	1
1,3,5-Trimethylbenzene	ND		ug/kg	150	14.	1
1,2,4-Trimethylbenzene	ND		ug/kg	150	24.	1
1,4-Dioxane	ND		ug/kg	7400	2600	1
p-Diethylbenzene	ND		ug/kg	150	13.	1
p-Ethyltoluene	ND		ug/kg	150	28.	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	150	14.	1
Ethyl ether	ND		ug/kg	150	25.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	370	100	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05
 Client ID: RB15_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:05
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 10:54
 Analyst: MV
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.1	1.9	1
1,1-Dichloroethane	ND		ug/kg	0.81	0.12	1
Chloroform	ND		ug/kg	1.2	0.11	1
Carbon tetrachloride	ND		ug/kg	0.81	0.19	1
1,2-Dichloropropane	ND		ug/kg	0.81	0.10	1
Dibromochloromethane	ND		ug/kg	0.81	0.11	1
1,1,2-Trichloroethane	ND		ug/kg	0.81	0.22	1
Tetrachloroethene	ND		ug/kg	0.41	0.16	1
Chlorobenzene	ND		ug/kg	0.41	0.10	1
Trichlorofluoromethane	ND		ug/kg	3.2	0.56	1
1,2-Dichloroethane	ND		ug/kg	0.81	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.41	0.14	1
Bromodichloromethane	ND		ug/kg	0.41	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.81	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	0.41	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	0.41	0.13	1
1,1-Dichloropropene	ND		ug/kg	0.41	0.13	1
Bromoform	ND		ug/kg	3.2	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.41	0.14	1
Benzene	0.26	J	ug/kg	0.41	0.14	1
Toluene	ND		ug/kg	0.81	0.44	1
Ethylbenzene	ND		ug/kg	0.81	0.11	1
Chloromethane	ND		ug/kg	3.2	0.76	1
Bromomethane	ND		ug/kg	1.6	0.47	1
Vinyl chloride	ND		ug/kg	0.81	0.27	1
Chloroethane	ND		ug/kg	1.6	0.37	1
1,1-Dichloroethene	ND		ug/kg	0.81	0.19	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.11	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-05

Date Collected: 01/08/19 13:05

Client ID: RB15_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.41	0.11	1
1,2-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,4-Dichlorobenzene	ND		ug/kg	1.6	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.6	0.16	1
p/m-Xylene	1.6		ug/kg	1.6	0.46	1
o-Xylene	1.0		ug/kg	0.81	0.24	1
Xylenes, Total	2.6		ug/kg	0.81	0.24	1
cis-1,2-Dichloroethene	ND		ug/kg	0.81	0.14	1
1,2-Dichloroethene, Total	ND		ug/kg	0.81	0.11	1
Dibromomethane	ND		ug/kg	1.6	0.19	1
Styrene	ND		ug/kg	0.81	0.16	1
Dichlorodifluoromethane	ND		ug/kg	8.1	0.74	1
Acetone	51		ug/kg	8.1	3.9	1
Carbon disulfide	ND		ug/kg	8.1	3.7	1
2-Butanone	ND		ug/kg	8.1	1.8	1
Vinyl acetate	ND		ug/kg	8.1	1.8	1
4-Methyl-2-pentanone	ND		ug/kg	8.1	1.0	1
1,2,3-Trichloropropane	ND		ug/kg	1.6	0.10	1
2-Hexanone	ND		ug/kg	8.1	0.96	1
Bromochloromethane	ND		ug/kg	1.6	0.17	1
2,2-Dichloropropane	ND		ug/kg	1.6	0.16	1
1,2-Dibromoethane	ND		ug/kg	0.81	0.23	1
1,3-Dichloropropane	ND		ug/kg	1.6	0.14	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.41	0.11	1
Bromobenzene	ND		ug/kg	1.6	0.12	1
n-Butylbenzene	0.24	J	ug/kg	0.81	0.14	1
sec-Butylbenzene	2.5		ug/kg	0.81	0.12	1
tert-Butylbenzene	0.45	J	ug/kg	1.6	0.10	1
o-Chlorotoluene	ND		ug/kg	1.6	0.16	1
p-Chlorotoluene	ND		ug/kg	1.6	0.09	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.4	0.81	1
Hexachlorobutadiene	ND		ug/kg	3.2	0.14	1
Isopropylbenzene	5.6		ug/kg	0.81	0.09	1
p-Isopropyltoluene	0.15	J	ug/kg	0.81	0.09	1
Naphthalene	0.86	J	ug/kg	3.2	0.53	1
Acrylonitrile	ND		ug/kg	3.2	0.94	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05
Client ID: RB15_18-20
Sample Location: BRONX, NY

Date Collected: 01/08/19 13:05
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	5.3		ug/kg	0.81	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.6	0.26	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.6	0.22	1
1,3,5-Trimethylbenzene	0.59	J	ug/kg	1.6	0.16	1
1,2,4-Trimethylbenzene	0.86	J	ug/kg	1.6	0.27	1
1,4-Dioxane	ND		ug/kg	81	28.	1
p-Diethylbenzene	1.5	J	ug/kg	1.6	0.14	1
p-Ethyltoluene	0.95	J	ug/kg	1.6	0.31	1
1,2,4,5-Tetramethylbenzene	4.3		ug/kg	1.6	0.16	1
Ethyl ether	ND		ug/kg	1.6	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.1	1.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	122		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-06
 Client ID: RB15_23-25
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:15
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 13:29
 Analyst: MKS
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	310	140	1
1,1-Dichloroethane	ND		ug/kg	62	9.0	1
Chloroform	ND		ug/kg	93	8.7	1
Carbon tetrachloride	ND		ug/kg	62	14.	1
1,2-Dichloropropane	ND		ug/kg	62	7.8	1
Dibromochloromethane	ND		ug/kg	62	8.7	1
1,1,2-Trichloroethane	ND		ug/kg	62	16.	1
Tetrachloroethene	ND		ug/kg	31	12.	1
Chlorobenzene	ND		ug/kg	31	7.9	1
Trichlorofluoromethane	ND		ug/kg	250	43.	1
1,2-Dichloroethane	ND		ug/kg	62	16.	1
1,1,1-Trichloroethane	ND		ug/kg	31	10.	1
Bromodichloromethane	ND		ug/kg	31	6.8	1
trans-1,3-Dichloropropene	ND		ug/kg	62	17.	1
cis-1,3-Dichloropropene	ND		ug/kg	31	9.8	1
1,3-Dichloropropene, Total	ND		ug/kg	31	9.8	1
1,1-Dichloropropene	ND		ug/kg	31	9.9	1
Bromoform	ND		ug/kg	250	15.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	31	10.	1
Benzene	610		ug/kg	31	10.	1
Toluene	ND		ug/kg	62	34.	1
Ethylbenzene	24	J	ug/kg	62	8.7	1
Chloromethane	ND		ug/kg	250	58.	1
Bromomethane	ND		ug/kg	120	36.	1
Vinyl chloride	ND		ug/kg	62	21.	1
Chloroethane	ND		ug/kg	120	28.	1
1,1-Dichloroethene	ND		ug/kg	62	15.	1
trans-1,2-Dichloroethene	ND		ug/kg	93	8.5	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-06

Date Collected: 01/08/19 13:15

Client ID: RB15_23-25

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	31	8.5	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.9	1
1,3-Dichlorobenzene	ND		ug/kg	120	9.2	1
1,4-Dichlorobenzene	ND		ug/kg	120	11.	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	57	J	ug/kg	120	35.	1
o-Xylene	46	J	ug/kg	62	18.	1
Xylenes, Total	100	J	ug/kg	62	18.	1
cis-1,2-Dichloroethene	ND		ug/kg	62	11.	1
1,2-Dichloroethene, Total	ND		ug/kg	62	8.5	1
Dibromomethane	ND		ug/kg	120	15.	1
Styrene	ND		ug/kg	62	12.	1
Dichlorodifluoromethane	ND		ug/kg	620	57.	1
Acetone	ND		ug/kg	620	300	1
Carbon disulfide	ND		ug/kg	620	280	1
2-Butanone	ND		ug/kg	620	140	1
Vinyl acetate	ND		ug/kg	620	130	1
4-Methyl-2-pentanone	ND		ug/kg	620	79.	1
1,2,3-Trichloropropane	ND		ug/kg	120	7.9	1
2-Hexanone	ND		ug/kg	620	73.	1
Bromochloromethane	ND		ug/kg	120	13.	1
2,2-Dichloropropane	ND		ug/kg	120	12.	1
1,2-Dibromoethane	ND		ug/kg	62	17.	1
1,3-Dichloropropane	ND		ug/kg	120	10.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	31	8.2	1
Bromobenzene	ND		ug/kg	120	9.0	1
n-Butylbenzene	90		ug/kg	62	10.	1
sec-Butylbenzene	90		ug/kg	62	9.0	1
tert-Butylbenzene	14	J	ug/kg	120	7.3	1
o-Chlorotoluene	ND		ug/kg	120	12.	1
p-Chlorotoluene	ND		ug/kg	120	6.7	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	190	62.	1
Hexachlorobutadiene	ND		ug/kg	250	10.	1
Isopropylbenzene	280		ug/kg	62	6.8	1
p-Isopropyltoluene	43	J	ug/kg	62	6.8	1
Naphthalene	92	J	ug/kg	250	40.	1
Acrylonitrile	ND		ug/kg	250	71.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-06
 Client ID: RB15_23-25
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:15
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	530		ug/kg	62	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	120	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	17.	1
1,3,5-Trimethylbenzene	140		ug/kg	120	12.	1
1,2,4-Trimethylbenzene	23	J	ug/kg	120	21.	1
1,4-Dioxane	ND		ug/kg	6200	2200	1
p-Diethylbenzene	140		ug/kg	120	11.	1
p-Ethyltoluene	31	J	ug/kg	120	24.	1
1,2,4,5-Tetramethylbenzene	440		ug/kg	120	12.	1
Ethyl ether	ND		ug/kg	120	21.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	310	88.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
 Client ID: RB15_28-30
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 10:28
 Analyst: MV
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.1	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.51	0.20	1
Chlorobenzene	ND		ug/kg	0.51	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.1	0.71	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.51	0.17	1
Bromodichloromethane	ND		ug/kg	0.51	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.51	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.51	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.51	0.16	1
Bromoform	ND		ug/kg	4.1	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.51	0.17	1
Benzene	0.31	J	ug/kg	0.51	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.1	0.95	1
Bromomethane	ND		ug/kg	2.0	0.59	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.46	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-07

Date Collected: 01/08/19 13:10

Client ID: RB15_28-30

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.51	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.57	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.93	1
Acetone	23		ug/kg	10	4.9	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.51	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.15	1
n-Butylbenzene	0.28	J	ug/kg	1.0	0.17	1
sec-Butylbenzene	0.72	J	ug/kg	1.0	0.15	1
tert-Butylbenzene	0.35	J	ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.20	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.1	0.17	1
Isopropylbenzene	1.1		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.1	0.66	1
Acrylonitrile	ND		ug/kg	4.1	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
 Client ID: RB15_28-30
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.59	J	ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	100	36.	1
p-Diethylbenzene	0.51	J	ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.39	1
1,2,4,5-Tetramethylbenzene	1.2	J	ug/kg	2.0	0.20	1
Ethyl ether	ND		ug/kg	2.0	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.1	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
 Client ID: RB16_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 00:01
 Analyst: JC
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	1.4		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.95	0.52	1
Ethylbenzene	ND		ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-08

Date Collected: 01/08/19 10:40

Client ID: RB16_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.95	0.28	1
Xylenes, Total	ND		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	ND		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
Vinyl acetate	ND		ug/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.95	0.16	1
sec-Butylbenzene	ND		ug/kg	0.95	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
Client ID: RB16_0-2
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	95	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	93		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09
 Client ID: RB16_13-15
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 00:27
 Analyst: JC
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	0.40	J	ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.95	0.52	1
Ethylbenzene	ND		ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-09

Date Collected: 01/08/19 10:45

Client ID: RB16_13-15

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.95	0.28	1
Xylenes, Total	ND		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	ND		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
Vinyl acetate	ND		ug/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.95	0.16	1
sec-Butylbenzene	ND		ug/kg	0.95	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09
 Client ID: RB16_13-15
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	95	34.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
 Client ID: RB16_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 00:53
 Analyst: JC
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1
Dibromochloromethane	ND		ug/kg	0.98	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.49	0.16	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	3.9	0.91	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
Chloroethane	ND		ug/kg	2.0	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
 Client ID: RB16_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
Xylenes, Total	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.13	1
Dibromomethane	ND		ug/kg	2.0	0.23	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.90	1
Acetone	ND		ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.4	1
2-Butanone	ND		ug/kg	9.8	2.2	1
Vinyl acetate	ND		ug/kg	9.8	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.12	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.98	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	ND		ug/kg	0.98	0.11	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.11	1
Naphthalene	ND		ug/kg	3.9	0.64	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
Client ID: RB16_18-20
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.98	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	98	34.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.17	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
 Client ID: SODUP05_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 02:35
 Analyst: MV
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	330	150	1
1,1-Dichloroethane	ND		ug/kg	66	9.5	1
Chloroform	ND		ug/kg	99	9.2	1
Carbon tetrachloride	ND		ug/kg	66	15.	1
1,2-Dichloropropane	ND		ug/kg	66	8.2	1
Dibromochloromethane	ND		ug/kg	66	9.2	1
1,1,2-Trichloroethane	ND		ug/kg	66	18.	1
Tetrachloroethene	ND		ug/kg	33	13.	1
Chlorobenzene	ND		ug/kg	33	8.4	1
Trichlorofluoromethane	ND		ug/kg	260	46.	1
1,2-Dichloroethane	ND		ug/kg	66	17.	1
1,1,1-Trichloroethane	ND		ug/kg	33	11.	1
Bromodichloromethane	ND		ug/kg	33	7.2	1
trans-1,3-Dichloropropene	ND		ug/kg	66	18.	1
cis-1,3-Dichloropropene	ND		ug/kg	33	10.	1
1,3-Dichloropropene, Total	ND		ug/kg	33	10.	1
1,1-Dichloropropene	ND		ug/kg	33	10.	1
Bromoform	ND		ug/kg	260	16.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	33	11.	1
Benzene	280		ug/kg	33	11.	1
Toluene	ND		ug/kg	66	36.	1
Ethylbenzene	16	J	ug/kg	66	9.3	1
Chloromethane	ND		ug/kg	260	61.	1
Bromomethane	ND		ug/kg	130	38.	1
Vinyl chloride	ND		ug/kg	66	22.	1
Chloroethane	ND		ug/kg	130	30.	1
1,1-Dichloroethene	ND		ug/kg	66	16.	1
trans-1,2-Dichloroethene	ND		ug/kg	99	9.0	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
Client ID: SODUP05_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	33	9.0	1
1,2-Dichlorobenzene	ND		ug/kg	130	9.5	1
1,3-Dichlorobenzene	ND		ug/kg	130	9.7	1
1,4-Dichlorobenzene	ND		ug/kg	130	11.	1
Methyl tert butyl ether	ND		ug/kg	130	13.	1
p/m-Xylene	ND		ug/kg	130	37.	1
o-Xylene	27	J	ug/kg	66	19.	1
Xylenes, Total	27	J	ug/kg	66	19.	1
cis-1,2-Dichloroethene	ND		ug/kg	66	12.	1
1,2-Dichloroethene, Total	ND		ug/kg	66	9.0	1
Dibromomethane	ND		ug/kg	130	16.	1
Styrene	ND		ug/kg	66	13.	1
Dichlorodifluoromethane	ND		ug/kg	660	60.	1
Acetone	ND		ug/kg	660	320	1
Carbon disulfide	ND		ug/kg	660	300	1
2-Butanone	ND		ug/kg	660	150	1
Vinyl acetate	ND		ug/kg	660	140	1
4-Methyl-2-pentanone	ND		ug/kg	660	84.	1
1,2,3-Trichloropropane	ND		ug/kg	130	8.4	1
2-Hexanone	ND		ug/kg	660	78.	1
Bromochloromethane	ND		ug/kg	130	13.	1
2,2-Dichloropropane	ND		ug/kg	130	13.	1
1,2-Dibromoethane	ND		ug/kg	66	18.	1
1,3-Dichloropropane	ND		ug/kg	130	11.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	33	8.7	1
Bromobenzene	ND		ug/kg	130	9.5	1
n-Butylbenzene	44	J	ug/kg	66	11.	1
sec-Butylbenzene	51	J	ug/kg	66	9.6	1
tert-Butylbenzene	ND		ug/kg	130	7.8	1
o-Chlorotoluene	ND		ug/kg	130	12.	1
p-Chlorotoluene	ND		ug/kg	130	7.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	200	66.	1
Hexachlorobutadiene	ND		ug/kg	260	11.	1
Isopropylbenzene	150		ug/kg	66	7.2	1
p-Isopropyltoluene	12	J	ug/kg	66	7.2	1
Naphthalene	53	J	ug/kg	260	43.	1
Acrylonitrile	ND		ug/kg	260	76.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
Client ID: SODUP05_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	270		ug/kg	66	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	130	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	130	18.	1
1,3,5-Trimethylbenzene	62	J	ug/kg	130	13.	1
1,2,4-Trimethylbenzene	ND		ug/kg	130	22.	1
1,4-Dioxane	ND		ug/kg	6600	2300	1
p-Diethylbenzene	81	J	ug/kg	130	12.	1
p-Ethyltoluene	ND		ug/kg	130	25.	1
1,2,4,5-Tetramethylbenzene	260		ug/kg	130	12.	1
Ethyl ether	ND		ug/kg	130	22.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	330	93.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 12:17
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
Client ID: SOFB04_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-13
 Client ID: SOTB07_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/09/19 11:32
 Analyst: RR

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-13
 Client ID: SOTB07_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-13
 Client ID: SOTB07_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	98		70-130

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/09/19 10:42
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1196086-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/09/19 10:42
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1196086-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/09/19 10:42
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1196086-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/19 11:50
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1196485-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

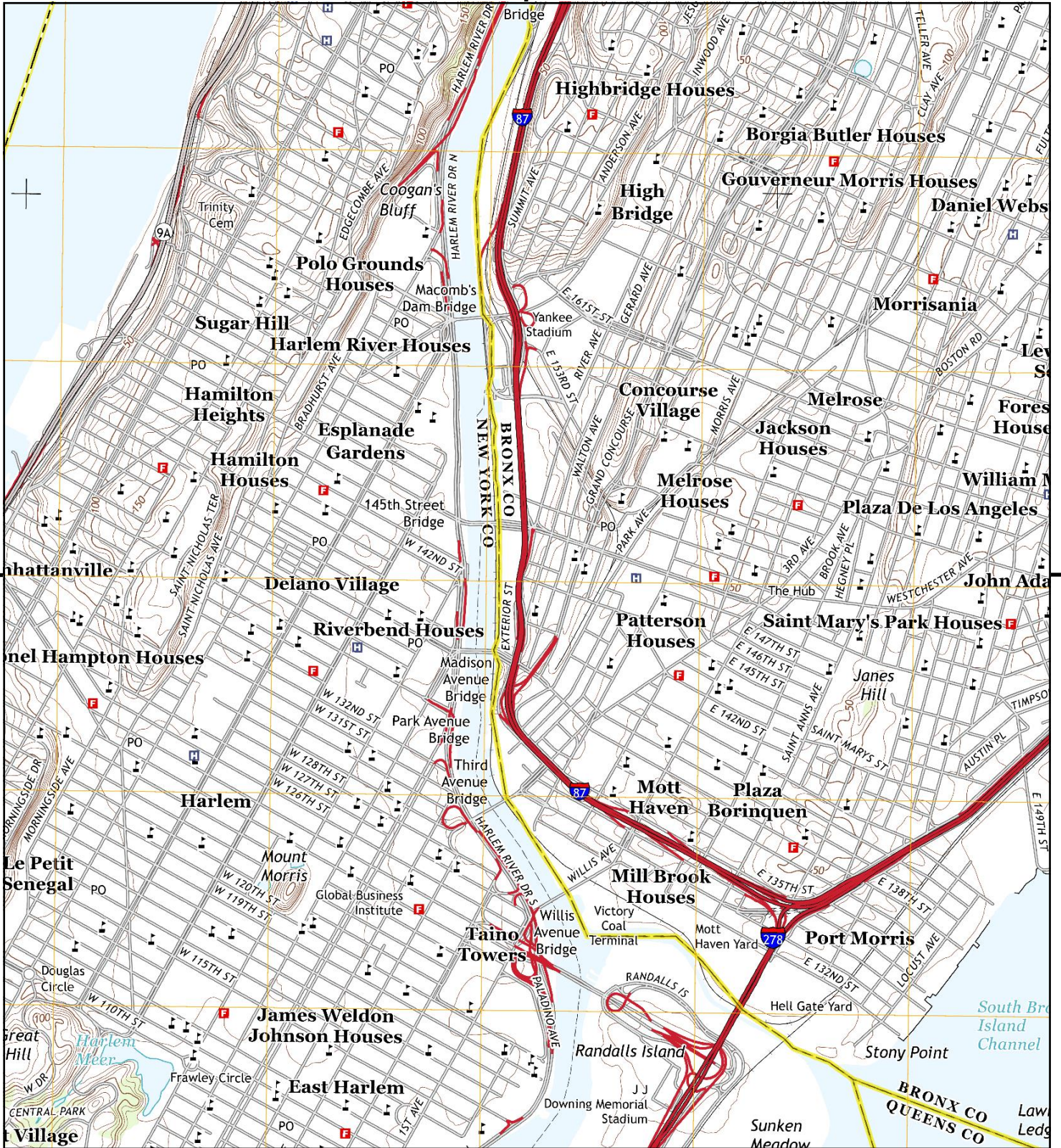
Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/19 11:50
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1196485-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70



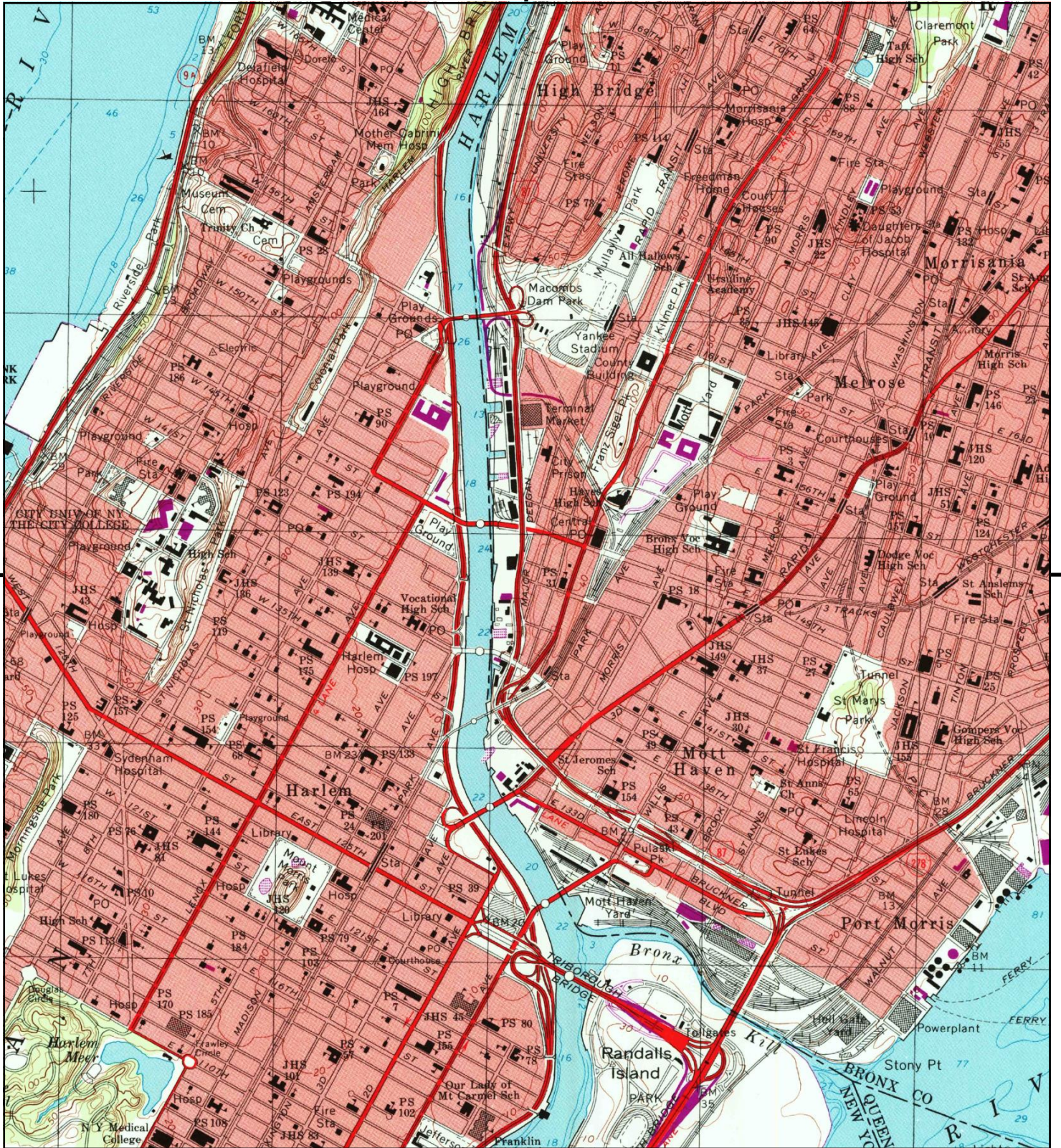
This report includes information from the following map sheet(s).



TP, Central Park, 2013, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





This report includes information from the following map sheet(s).



TP, Central Park, 1997, 7.5-minute

SITE NAME: 404 Exterior Street
ADDRESS: 404 Exterior Street
 Bronx, NY 10451
CLIENT: Langan Engineering, Inc.





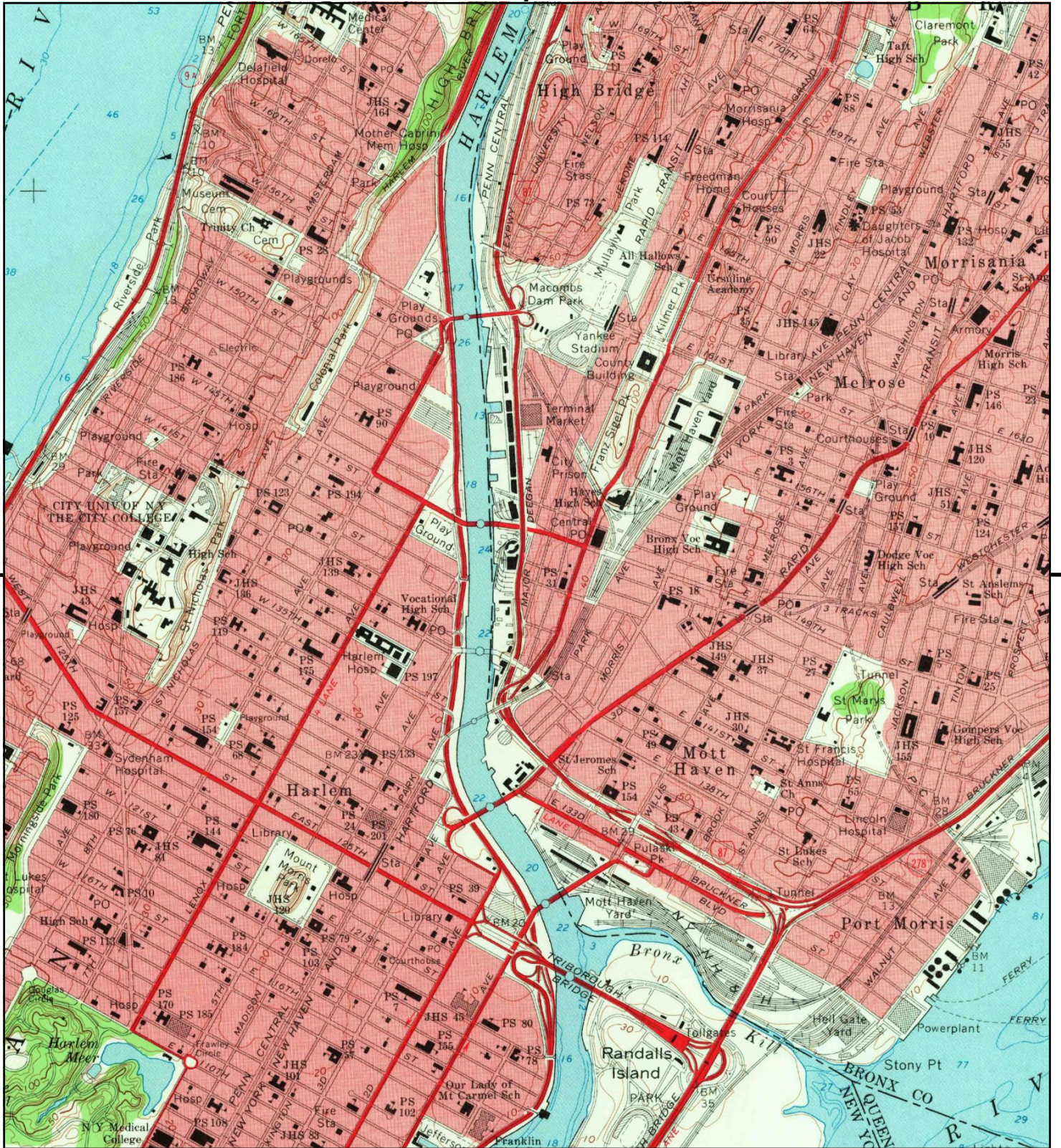
This report includes information from the following map sheet(s).



TP, Central Park, 1979, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





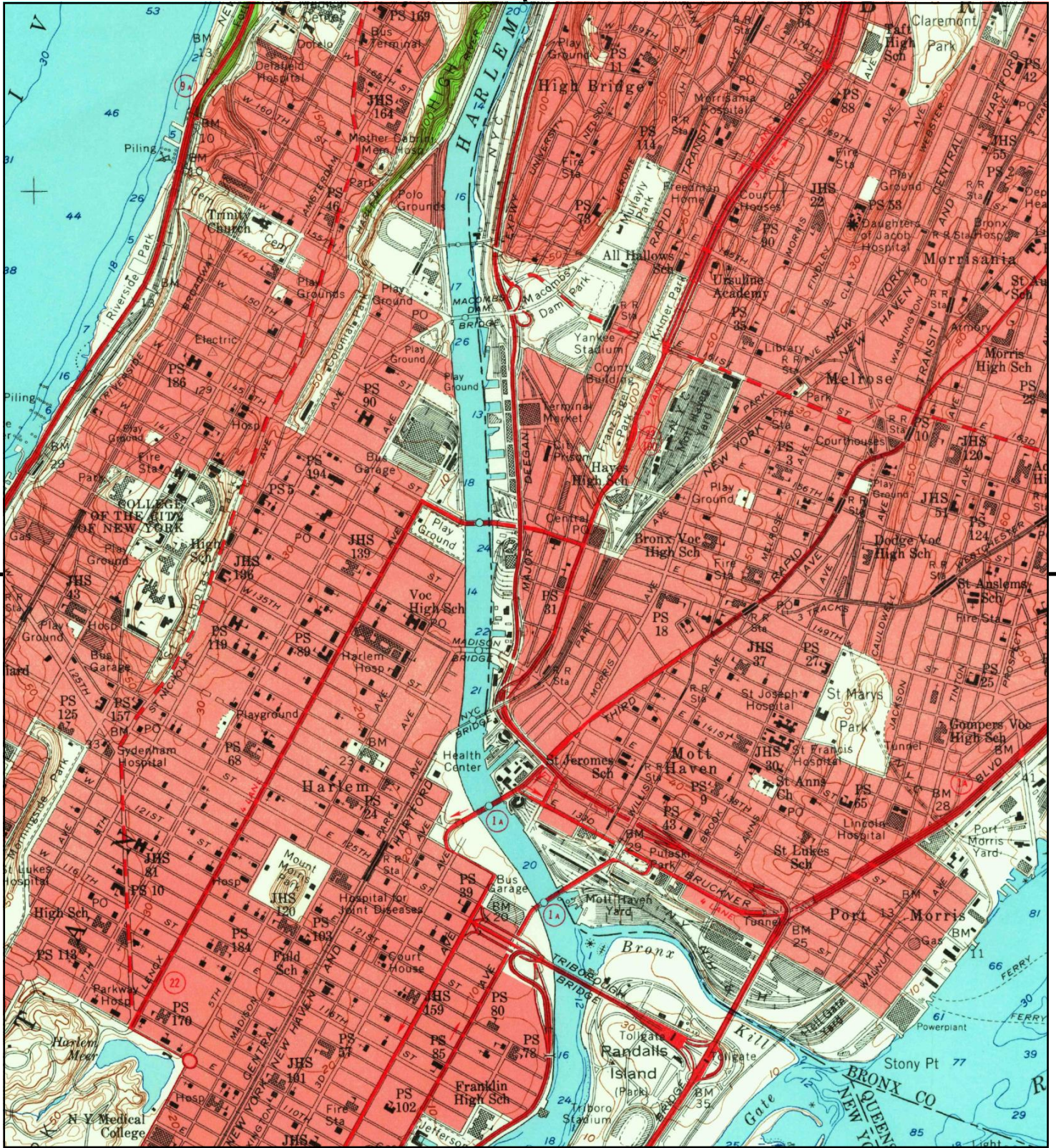
This report includes information from the following map sheet(s).



TP, Central Park, 1966, 7.5-minute

SITE NAME: 404 Exterior Street
ADDRESS: 404 Exterior Street
 Bronx, NY 10451
CLIENT: Langan Engineering, Inc.





This report includes information from the following map sheet(s).



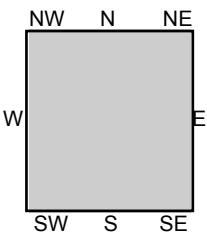
TP, Central Park, 1956, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





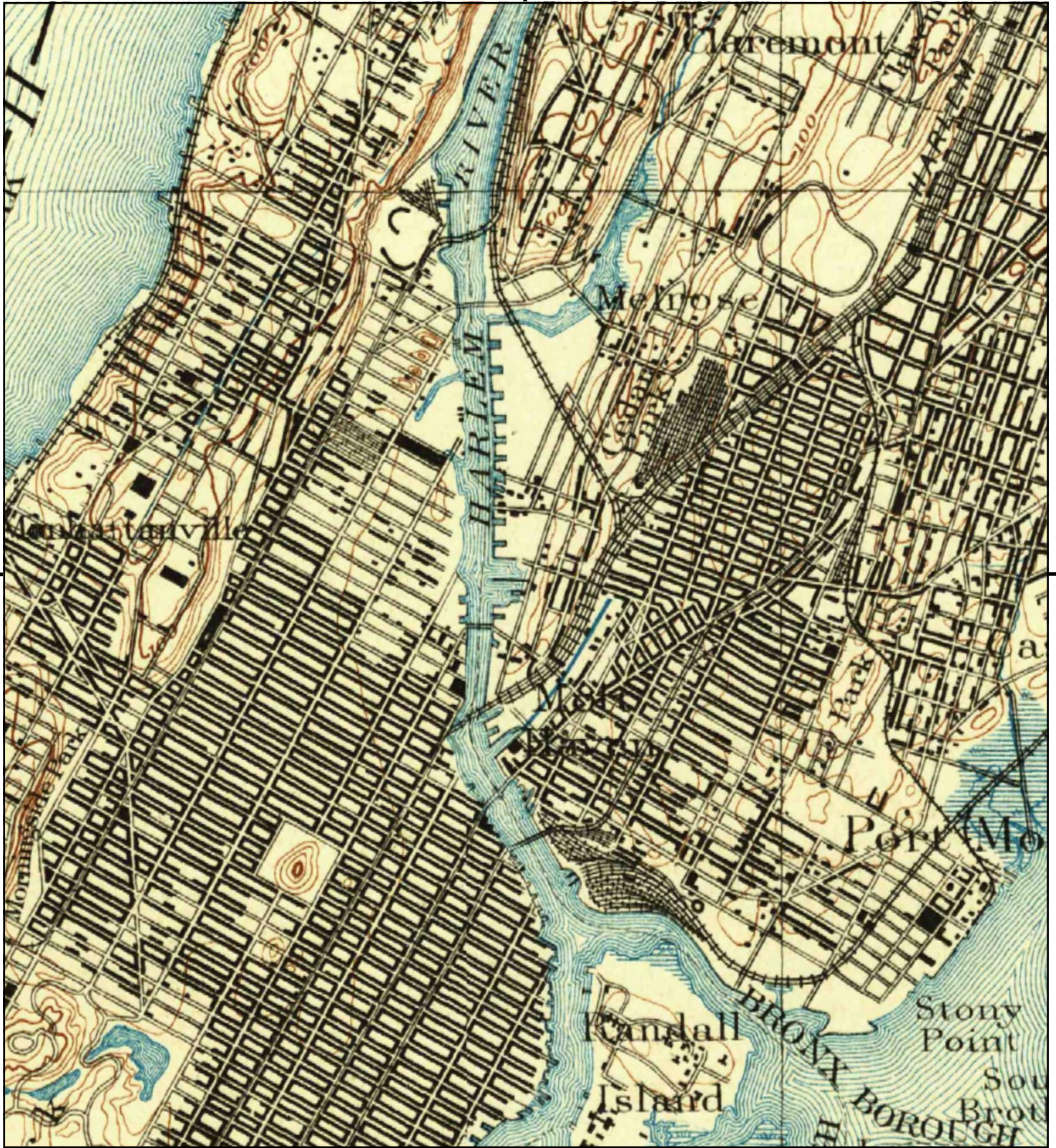
This report includes information from the following map sheet(s).



TP, Central Park, 1947, 7.5-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





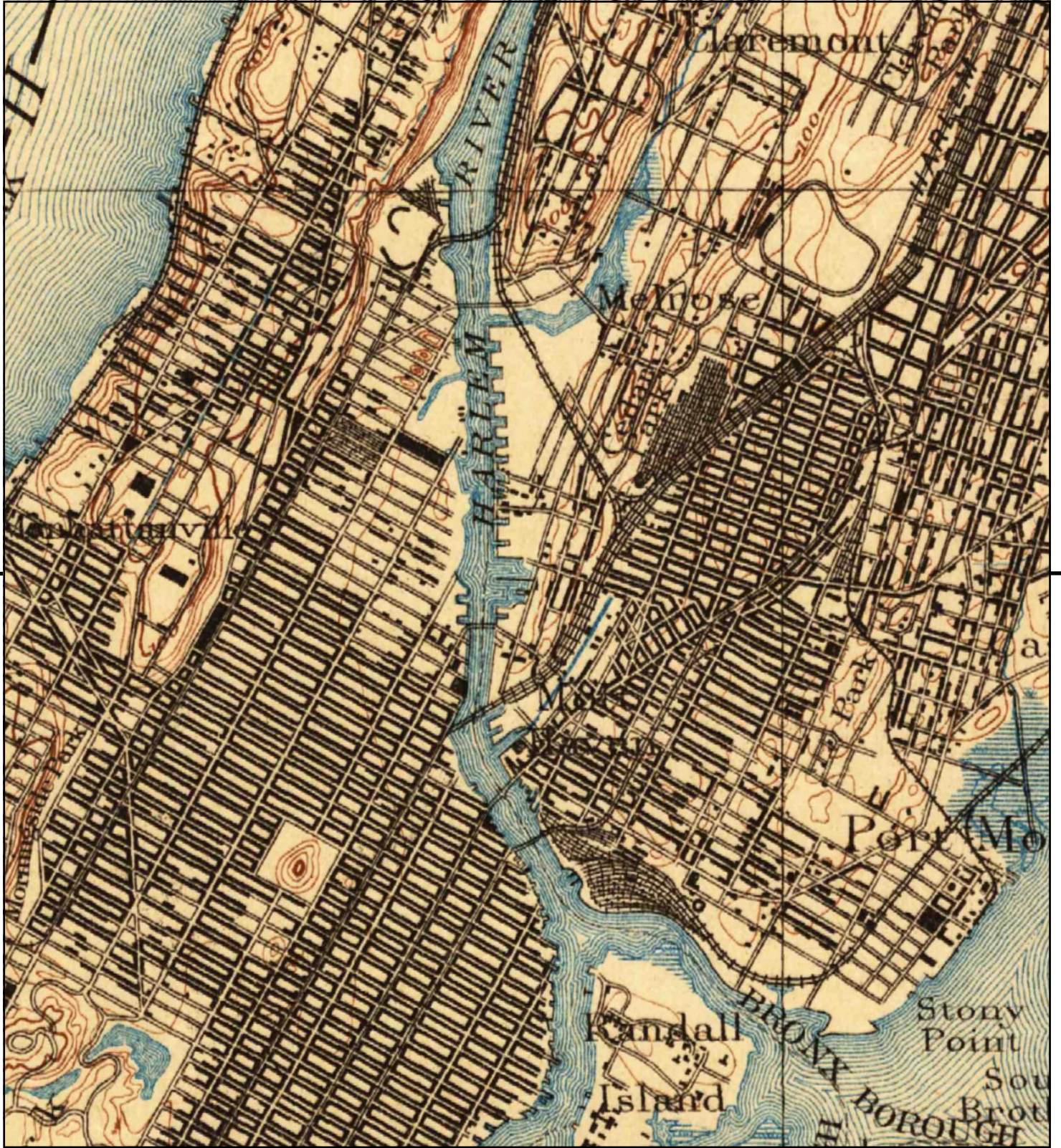
This report includes information from the following map sheet(s).



TP, Harlem, 1900, 15-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.





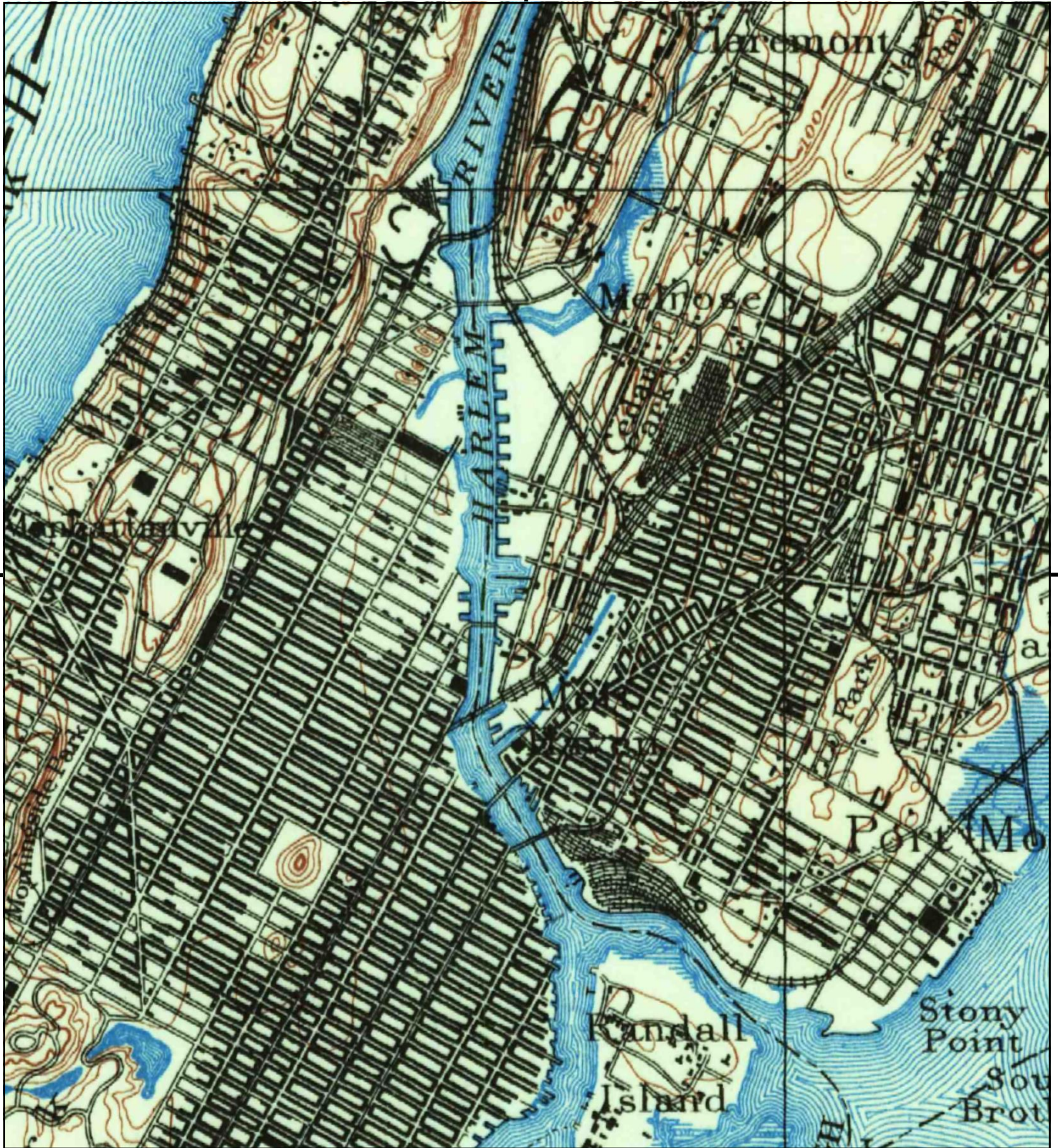
This report includes information from the following map sheet(s).



TP, Harlem, 1898, 15-minute

SITE NAME: 404 Exterior Street
ADDRESS: 404 Exterior Street
Bronx, NY 10451
CLIENT: Langan Engineering, Inc.





This report includes information from the following map sheet(s).



TP, Harlem, 1897, 15-minute

SITE NAME: 404 Exterior Street
 ADDRESS: 404 Exterior Street
 Bronx, NY 10451
 CLIENT: Langan Engineering, Inc.



APPENDIX J

City Directory Abstract

404 Exterior Street

404 Exterior Street
Bronx, NY 10451

Inquiry Number: 5589479.5
March 14, 2019

The EDR-City Directory Abstract

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1927 through 2014. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 200 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2014	EDR Digital Archive	-	X	X	-
2010	EDR Digital Archive	-	X	X	-
2005	Hill-Donnelly Information Services	-	X	X	-
2000	Cole Information Services	-	X	X	-
1993	New York Telephone	-	X	X	-
1983	New York Telephone	-	X	X	-
1976	New York Telephone Company	-	X	X	-
1971	New York Telephone	-	X	X	-
1965	New York Telephone Company	-	X	X	-
1961	New York Telephone	-	X	X	-
1956	New York Telephone	-	X	X	-
	New York Telephone	X	X	X	-

EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
1949	New York Telephone	-	X	X	-
	New York Telephone	X	X	X	-
1940	New York Telephone	-	X	X	-
1931	Manhattan and Bronx Directory Publishing Company Residential Directory	-	X	X	-
1927	New York Telephone	-	X	X	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

<u>Address</u>	<u>Type</u>	<u>Findings</u>
417 Gerard Avenue	Client Entered	X
445 Gerard Avenue	Client Entered	X
445 Maj Wm Deegan Boulevard	Client Entered	
385 Gerard Avenue	Client Entered	X
441 River Avenue	Client Entered	
445 River Avenue	Client Entered	X
444 Gerard Avenue	Client Entered	X
121 East 144 Street	Client Entered	
120 East 144 Street	Client Entered	X

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

404 Exterior Street
Bronx, NY 10451

FINDINGS DETAIL

Target Property research detail.

EXTERIOR

404 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1956	METRO DECORATG CO INC PAINTG CONTRS	New York Telephone
	METRO INDUSTRL PAINTING CO INC	New York Telephone
1949	TEXACHEM CORP	New York Telephone

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

E 144

100 E 144

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1965	ROYNAT CORP	New York Telephone Company
1961	ROYNAT CORP	New York Telephone
	STANART PRINTED SPECIALTY CO INC	New York Telephone
1956	ROYNAT CORP	New York Telephone
1949	ROYNAT CORP	New York Telephone

101 E 144

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	LOWY EDW J DR B	New York Telephone Company
1971	LOWY EDW J DR B	New York Telephone
1965	LOWY EDW J DR B	New York Telephone Company
1961	LOWY EDW J DR B	New York Telephone
1956	LOWY EDW J DR B	New York Telephone
1949	KEM LABS	New York Telephone
	LOWY EDW J SC DB	New York Telephone

120 E 144

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	PANORAMIC INDUSTRIES INC	New York Telephone
	MILEDYS RESTAURANT	New York Telephone
1983	PANORAMIC INDUSTRIES INC	New York Telephone
	LIGHTEMORE B	New York Telephone
	EGGLESTON OFC EQUIPT CO INC	New York Telephone
1976	CROSSWAY COFFEE SHOP INC	New York Telephone Company
	CROSSWAY COFFEE SHOPS	New York Telephone Company
	EGLESTON OFC EQUOPT CO INC	New York Telephone Company
	LIVING WALLS INC	New York Telephone Company
	MODUMATIC INDUSTRIES INC	New York Telephone Company
	VALTRONIC CORP THE	New York Telephone Company
1971	COSMOS LIGHTING CORP	New York Telephone
	CROSSWAY COFFEE SHOP INC	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1971	CROSSWAY COFFEE SHOPS	New York Telephone
	EGGLESTON OFC EQUIPT COLOC	New York Telephone
	LUXCRAFT INC IMPS	New York Telephone
	VALTRONIC CORP THE	New York Telephone
1965	COSMOS LIGHTING CORP	New York Telephone Company
	CROSSWAY COFFEE SHOPS	New York Telephone Company
	LUXCRAFT INC IMPS	New York Telephone Company
1961	GERARD LUNCHEONETTE INC	New York Telephone
	SAW REALTY CO	New York Telephone
1956	DURALITE CO INC	New York Telephone
	GERARD LUNCHEONETTE INC	New York Telephone
	STATE DENTAL TECHNICIAN S INC DNTL LAB	New York Telephone
1949	GENL BAKING CO BRNX BL & ROSEWD	New York Telephone

E 144TH

100 E 144TH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1931	Prince Eveleyn	Manhattan and Bronx Directory Publishing Company Residential Directory
1927	Manzo M rags & paper	New York Telephone

101 E 144TH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1940	Amer Franklin Olean Tiles inc warehse	New York Telephone
	Franklin Tile Co	New York Telephone
	Olean Tile Co	New York Telephone

110 E 144TH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1931	Bishop Dorothy	Manhattan and Bronx Directory Publishing Company Residential Directory

120 E 144TH

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1940	Bakery	New York Telephone
	Genl Baking Co Exec off	New York Telephone
	Equity Const Co	New York Telephone

FINDINGS

E 144TH ST

120 E 144TH ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Webers Online 1s	Hill-Donnelly Information Services
	Tori Realty Corp 2 F	Hill-Donnelly Information Services
2000	TORI REALTY CORP	Cole Information Services

East 144 Street

120 East 144 Street

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Tori Realty Corp 2 F	Hill-Donnelly Information Services
	Webers Online 1s	Hill-Donnelly Information Services
2000	TORI REALTY CORP	Cole Information Services
1993	MILEDYS RESTAURANT	New York Telephone
	PANORAMIC INDUSTRIES INC	New York Telephone
1983	EGGLESTON OFC EQUIPT CO INC	New York Telephone
	LIGHTEMORE B	New York Telephone
	PANORAMIC INDUSTRIES INC	New York Telephone
1976	CROSSWAY COFFEE SHOP INC	New York Telephone Company
	CROSSWAY COFFEE SHOPS	New York Telephone Company
	EGLESTON OFC EQUOPT CO INC	New York Telephone Company
	LIVING WALLS INC	New York Telephone Company
	MODUMATIC INDUSTRIES INC	New York Telephone Company
	VALTRONIC CORP THE	New York Telephone Company
1971	COSMOS LIGHTING CORP	New York Telephone
	CROSSWAY COFFEE SHOP INC	New York Telephone
	CROSSWAY COFFEE SHOPS	New York Telephone
	EGGLESTON OFC EQUIPT COLOC	New York Telephone
	LUXCRAFT INC IMPS	New York Telephone
	VALTRONIC CORP THE	New York Telephone
1965	COSMOS LIGHTING CORP	New York Telephone Company
	CROSSWAY COFFEE SHOPS	New York Telephone Company
	LUXCRAFT INC IMPS	New York Telephone Company
1961	GERARD LUNCHEONETTE INC	New York Telephone
	SAW REALTY CO	New York Telephone
1956	DURALITE CO INC	New York Telephone
	GERARD LUNCHEONETTE INC	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1956	STATE DENTAL TECHNICIAN S INC DNTL LAB	New York Telephone
1949	GENL BAKING CO BRNX BL & ROSEWD	New York Telephone
1940	Equity Const Co	New York Telephone
	Genl Baking Co Exec off	New York Telephone
	Bakery	New York Telephone

EXTERIOR

385 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	BORAX PAPER PRODS INC	New York Telephone

399 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	AMBOY BUS CO	New York Telephone
	ATLANTIC HUDSON INC	New York Telephone

440 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	SMIR ADVTNG & PROMOTION STORAGE	New York Telephone
	ALLIED OUTDOOR ADVTNG INC	New York Telephone
1983	ALLIED OUTDOOR ADVTNG INC	New York Telephone
1976	MANDELL & CORSINI MECHANICAL CONSTR CORP	New York Telephone Company
1965	POLLACK NORMAN H ATTY	New York Telephone Company
1956	CITY CINDER SUPL CORP	New York Telephone
	MANHATN & BRONX CINDER SUPL CO INC	New York Telephone
1949	CITY CINDER SUPL CORP	New York Telephone
	LA ROCCA ANTHONY C B	New York Telephone
	LA ROCCA ANTHONY C INC CONTRS	New York Telephone
	MANHATN & BRONX CINDER SUPL CO INC	New York Telephone
	DOLLAN PETER F B	New York Telephone

441 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1983	DITZLER AUTOMOTIVE FINISHES PPG INDUSTRIES INC	New York Telephone
1976	DITZLER COLOR DIV OF PPG INDUSTRIES INC	New York Telephone Company

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	DITZLER AUTOMOTIVE FINISHES-P P G INDUSTRIES INC	New York Telephone Company
	DITZLER AUTOMTV FINISHES	New York Telephone Company
1971	DITZLER AOTOMTV FINISHES	New York Telephone
	DITZLER COLOR DIV OF PPG INDUSTRIES INC	New York Telephone
	DITZLER AUTOMOTIVE FINISHES P P G INDUSTRIES INC	New York Telephone
1965	DITZLER COLOR DIV OF PITTSBURGH PLATE GLASS CO	New York Telephone Company
1961	DITZLER COLOR DIV OF PITTSBURGH PLATE GLASS CO	New York Telephone

445 EXTERIOR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1983	NATIONAL PLYWOOD CO INC	New York Telephone
	DIMENSIONAL INDUSTRIES LTD	New York Telephone
	FLAX STEPHEN G B	New York Telephone
1976	NATL PLYWD CO INC	New York Telephone Company
1971	NATL PLYWD CO INC	New York Telephone
1965	NATL PLYWOOD CO INC	New York Telephone Company
1961	NATL PLYWOOD CO INC	New York Telephone
1956	NATL PLYWOOD CO INC	New York Telephone
1949	NATL PLYWOOD CO INC	New York Telephone

Exterior St

325 Exterior St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	INTERNTAL PRIVATE CAR SVC INC	EDR Digital Archive
	INTERNTAL PRIVATE CAR SVC INC	EDR Digital Archive

355 Exterior St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	JC FOOD SYSTEM INC	EDR Digital Archive
	KIMS PROVISION CO INC	EDR Digital Archive
	LEE & GIANT FOOD SYSTEM INC	EDR Digital Archive
	JC FOOD SYSTEM INC	EDR Digital Archive
	KIMS PROVISION CO INC	EDR Digital Archive
	LEE & GIANT FOOD SYSTEM INC	EDR Digital Archive
2010	LEGITO INC	EDR Digital Archive

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	LEGITO INC	EDR Digital Archive

399 Exterior St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	ATLANTIC EXPRESS TRNSP CORP	EDR Digital Archive
	AMBOY BUS CO INC	EDR Digital Archive
	ATLANTIC EXPRESS TRNSP CORP	EDR Digital Archive
	AMBOY BUS CO INC	EDR Digital Archive

EXTERIOR ST

399 EXTERIOR ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Tract	Hill-Donnelly Information Services
	Amboy Bus Co Inc	Hill-Donnelly Information Services
	Atlantic Hudson Inc	Hill-Donnelly Information Services
2000	AMBOY BUS CO	Cole Information Services
	ATLANTIC HDSN INC	Cole Information Services

440 EXTERIOR ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Clear Channel Outdoor is	Hill-Donnelly Information Services
	Universal Outdoor Inc 1 s	Hill-Donnelly Information Services
2000	UNIVERSAL OTDR INC	Cole Information Services
1940	Dollan Peter F Inc rubbish	New York Telephone
	Manhatn & Bronx Cinder Supply Co	New York Telephone
1931	Cerulla Pasquale	Manhattan and Bronx Directory Publishing Company Residential Directory

441 EXTERIOR ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1940	Pittsburgh Plate Glass Co	New York Telephone

449 EXTERIOR ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1940	Goldberg Jacob b	New York Telephone

FINDINGS

GERARD AVE

417 GERARD AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Glasstown Inc	Hill-Donnelly Information Services
2000	GASSTOWN INC	Cole Information Services
1993	GLASSTOWN INC	New York Telephone
1976	ALTYPE FIRE DOOR CORP	New York Telephone Company

Gerard Avenue

385 Gerard Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2005	Multi Unit Address 385 Gerard Av LLC	Hill-Donnelly Information Services	
	American Housewares Mfg Corp	Hill-Donnelly Information Services	
	Angora Novelty Corp I R	Hill-Donnelly Information Services	
	Jerry Elsner Co	Hill-Donnelly Information Services	
	John Nguyen Woodworking Inc	Hill-Donnelly Information Services	
	Loveline Industries Inc	Hill-Donnelly Information Services	
	Perfect Shoulder Inc	Hill-Donnelly Information Services	
	Rosa Mark Copy Svc 1 s	Hill-Donnelly Information Services	
	Salzberg Creations Inc R	Hill-Donnelly Information Services	
	Sleeping Partners	Hill-Donnelly Information Services	
	Snap N Wear	Hill-Donnelly Information Services	
	2000	ABRAM EMB NOAH	Cole Information Services
		ALL-TCH WR PRDCTS	Cole Information Services
AMRCN HSWRS MFG		Cole Information Services	
ANGORA NOVL T CORP		Cole Information Services	
BARCLAY BUILDING		Cole Information Services	
CHILDRENS WEAR MFR		Cole Information Services	
ELSNER JRRY CO INC		Cole Information Services	
KORAM TRADING CO		Cole Information Services	
LVLN INDSTRS INC		Cole Information Services	
LYNN YARN CORP		Cole Information Services	
S & S INDSTRS INC		Cole Information Services	
SPORT SCREEN INC	Cole Information Services		
1993	ALPER INC	New York Telephone	
	AMERICAN HOUSEWARES MFG CORP	New York Telephone	
	ANGORA NOVELTY CORP TOYS	New York Telephone	
	ATLAS H & H INC	New York Telephone	

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	BARCLAY BUILDING	New York Telephone
	BORDA PRODUCTS INC	New York Telephone
	CHILDRENS WEAR MR	New York Telephone
	CROSS PATCH LTD	New York Telephone
	ELSNER JERRY CO INC TUR TOYS	New York Telephone
	HAMBURGER FRANK E PATTERNS	New York Telephone
	KORAM PRNTNG & TRADING CO	New York Telephone
	LOVELLNE INDSTRIES INC	New York Telephone
	LYNN YARN CORP	New York Telephone
	ROYAL SEWING CO INC	New York Telephone
	S & S INDUSTRIES INC	New York Telephone
	SPORT SCREEN INC	New York Telephone
	SUNGMIN FASHIONS INC	New York Telephone
	WHITE METAL JEWELRY EQUIP CORP	New York Telephone
1983	ALPER INC	New York Telephone
	ANGORA NOVELTY CORP TOYS	New York Telephone
	AUTOMATIC WIRE GOODS MFG CO INC	New York Telephone
	BARCLAY BUILDING	New York Telephone
	BLOOMCRAFT INC	New York Telephone
	ELSNER JERRY CO INC FUR TOYS	New York Telephone
	I SIMON INC	New York Telephone
	LYNIN JAMES INC	New York Telephone
	LYNN YARN CORP	New York Telephone
	M & M CARPENTER	New York Telephone
	ROYAL SEWING CO INC	New York Telephone
	S & S INDUSTRIES INC	New York Telephone
	WHITE METAL JEWELRY EQUIPT CORP	New York Telephone
	1976	AUTOMATIC WIRE GOODS MFG CO INC
BALTIC INDUSTRIES INC		New York Telephone Company
BLOOMCRAFT INC		New York Telephone Company
I SIMON INC		New York Telephone Company
JACOBY BENDER INC		New York Telephone Company
LION RIBBON CO		New York Telephone Company
NOMAL SPORTSWR		New York Telephone Company
ROYAL SEWING CO INC		New York Telephone Company
S & S INDUSTRIES INC WIRE PRODUCTS		New York Telephone Company

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	SIMCO SHOE STORES OFFICE WAREHOUSE	New York Telephone Company
	TAURONE LABEL COINC	New York Telephone Company
	WALKER H M B	New York Telephone Company
	WEINFELD AARON SPORTSWR	New York Telephone Company
	WUNDERWEAR MILLS INC	New York Telephone Company
1971	ALLEN HOLLANDER CO INC LABLS	New York Telephone
	AMICO INSTRMNT CORP	New York Telephone
	AUTOMATIC WIRE GOODS MFG CO INC	New York Telephone
	BARCLAY BUILDING	New York Telephone
	BLOOM CHAS INC	New York Telephone
	COXEN PRESS	New York Telephone
	INTERNATL SALT CO	New York Telephone
	INTERNATL SALT CO WRHSE	New York Telephone
	LION RIBBON AFFILIATES	New York Telephone
	LION RIBBON CO	New York Telephone
	ROYAL SEWING CO	New York Telephone
	ROYAL SEWING CO	New York Telephone
	S & S INDUSTRIES INC	New York Telephone
	S & S INDUSTRIES INC	New York Telephone
	S & S INDUSTRIES INC WIRE PRODUCTS	New York Telephone
	SIMCO SHOE STORES OFC & WRHSE	New York Telephone
	STANDARD NOVELTY BOX CO INC	New York Telephone
	WUNDERWEAR MILLS INC	New York Telephone
	WERNER PRNTNG & LITHOGRAPH CO	New York Telephone
	1965	ABLE LABELS
ABLE-STIK		New York Telephone Company
ABSORBO BEER PAD CO INC		New York Telephone Company
AEROMARINE INSTRUMENT CO INC OFC & FCTY		New York Telephone Company
ALLEN HOLLANDER CO INC LABIS		New York Telephone Company
AMICO INSTRMNT CORP		New York Telephone Company
ANTOVILLE MILTON F B		New York Telephone Company
AUTOMATIC WIRE GOODS MFG CO INC		New York Telephone Company
BARCLAY BUILDING		New York Telephone Company
BARCLAY MFG CO INC TILE BD		New York Telephone Company
BARCLITE CORP OF AMER		New York Telephone Company

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1965	BERLISS ARTHUR D JR B	New York Telephone Company
	BLOOM CHAS INC	New York Telephone Company
	BRASSIERE ACESRIES LTD	New York Telephone Company
	COXEN PRESS	New York Telephone Company
	HARMAC MFG CO	New York Telephone Company
	HOLLANDER ALLEN CO INC	New York Telephone Company
	HOLLANDER S LABELS	New York Telephone Company
	HOLLANDER STANLEY LABELS	New York Telephone Company
	INSTRUMENTOOL CORP THE	New York Telephone Company
	INTERNATL SALT CO WRHSE	New York Telephone Company
	RINEL CONTRCTG CO	New York Telephone Company
	ROYAL SEWING CO	New York Telephone Company
	ROYAL SEWING CO	New York Telephone Company
	ROYBAR CORP	New York Telephone Company
	ROYBAR CORP TILE BD	New York Telephone Company
	S & S INDUSTRL PRODS CORP	New York Telephone Company
	S & S INDUSTRIES INC WIRE PRODS	New York Telephone Company
	STANDARD NOVELTY BOX CO INC	New York Telephone Company
	TAURONE LABEL CO INC	New York Telephone Company
	WERNER PRNTNG & LITHO CO	New York Telephone Company
WUNDERWEAR MILLS INC	New York Telephone Company	
1961	ABLE LABELS	New York Telephone
	ABLE STIK	New York Telephone
	ABSORBO BEER PAD CO INC	New York Telephone
	AEROMARINE INSTRUMENT CO INC OFC & FCTY	New York Telephone
	ALLEN HOLLANDER CO INC LABLS	New York Telephone
	AMICO INSTRMNT CORP	New York Telephone
	ANTOVILLE MILTON F B	New York Telephone
	AUTOMATIC WIRE GOODS MFG CO INC	New York Telephone
	BARCLAY BUILDING	New York Telephone
	BARCLAY MFG CO INC TILE BD	New York Telephone
	BARCLITE CORP OF AMER	New York Telephone
	BERLISS ARTHUR D JR B	New York Telephone
	BRASSLERE ACESRIES LTD	New York Telephone
	COUNTY MACH & TOOL CO	New York Telephone
	COXEN PRESS	New York Telephone
	CROWN STATIONERS	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1961	DEPENDABLE SHOES INC	New York Telephone
	HARMAC MFG CO	New York Telephone
	HOLLANDER ALLEN CO INC	New York Telephone
	HOLLANDER S LABELS	New York Telephone
	HOLLANDER STANLEY LABELS	New York Telephone
	ICON PRODS INC	New York Telephone
	INSTRUMENTOOL CORP THE	New York Telephone
	INTERNATL SALT CO INC WRHSE	New York Telephone
	ROBEE MFG CO INC HNDBG ORNMTS	New York Telephone
	ROYAL SEWING CO	New York Telephone
	ROYAL SEWING CO	New York Telephone
	ROYBAR CORP	New York Telephone
	ROYBAR CORP TILE BD	New York Telephone
	S & S INDUSTRL PRODS CORP	New York Telephone
	S & S INDUSTRIES INC WIRE PRODS	New York Telephone
	STANDARD NOVELTY BOX CO INC	New York Telephone
	TAURONE LABEL CO INC	New York Telephone
	WERNER PRNTNG & LITHO CO	New York Telephone
	1956	ABLE STIK
ABSORBO BEER PAD CO INC		New York Telephone
ABSORBO PRODS CORP		New York Telephone
AEROMARINE INSTRUMENT CO INC OFC & FCTY		New York Telephone
ALLEN HOLLANDER CO INC LABELS		New York Telephone
AUTOMATIC WIRE GOODS MFG CO INC		New York Telephone
BARCLAY BUILDING		New York Telephone
BARCLITE CO RP OF AMERICA		New York Telephone
BLOOM CHAS INC		New York Telephone
BRONX TERMNL BONDED WAREHOUSE CO INC		New York Telephone
COXEN PRESS		New York Telephone
CRAIG SUPL CORP		New York Telephone
CROWN DIE CASTING CO		New York Telephone
CROWN DIE CASTING CO		New York Telephone
CROWN STATIONERS		New York Telephone
DUNLOP TIRE & RUBR CORP		New York Telephone
HARMAC SPORTSWR CO		New York Telephone
HOLLANDER ALLEN CO INC		New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1956	HOLLANDER HAROLD SANFORD LABLS	New York Telephone
	HOLLANDER S LABELS	New York Telephone
	HOLLANDER STANLEY LABELS	New York Telephone
	INSTRUMENTOOL CORP THE	New York Telephone
	INTERNATL SALT CO INC	New York Telephone
	LINBRO MFG CORP	New York Telephone
	MANOR-MADE SHOES INC	New York Telephone
	MATISSE BROS INC LENSES	New York Telephone
	MCCABE KNITTING MILLS	New York Telephone
	ROBEE MFG CO INC HNDBG ORNMTS	New York Telephone
	ROYAL SEWING CO	New York Telephone
	ROYBAR CORP TILE BD	New York Telephone
	RULAND PAUL E INC WOOLNS	New York Telephone
	STANART PRINTED SPECIALTY CO INC	New York Telephone
	STANDARD NOVELTY BOX CO INC	New York Telephone
	STERLING ELEC MOTORS INC	New York Telephone
	TAURONE LABEL CO INC	New York Telephone
	TAURONE LABEL CO INC	New York Telephone
	WERNER PRNTNG & LITHO CO	New York Telephone
1949	AEROMARINE INSTRUMENT CO INC OFC & FCTY	New York Telephone
	ALGENE STUDIOS HND PAINTED TEXTLS	New York Telephone
	AQUA SYSTM INC	New York Telephone
	ATLANTIC LIQUOR WHOLESALER	New York Telephone
	BARCLAY MFG CO INC TILE BD	New York Telephone
	BRONX LEHIGH BLDG	New York Telephone
	BRONX TERM BONDED WAREHOUSE CO INC	New York Telephone
	COXEN PRESS	New York Telephone
	CREST VIEW WINES INC	New York Telephone
	CRESTWICK INC PUBLS	New York Telephone
	CROWN DIE CASTING CO	New York Telephone
	DEMON TRUCKING CORP	New York Telephone
	DUNLOP TIRE & RUBR CORP	New York Telephone
	HELLER CANDY CO INC	New York Telephone
	INTERNATL SALT CO INC	New York Telephone
	MANHATN GROCERY CO	New York Telephone
	MANHATN QUALITY STORE WAREHSE	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1949	MATISSE BROS LENSES	New York Telephone
	NEPTUNE METER CO	New York Telephone
	ROYBAR CORP TILE BD	New York Telephone
	RULAND PAUL E INC WOOLNS	New York Telephone
	STANDARD UNBREAKABLE WATCH CRYSTALS INC	New York Telephone
	UNIT VENETIAN BLIND SUPL CORP	New York Telephone
	URFER ADOLF B	New York Telephone
	ZIERICK MFG CORP METL STMPNGS	New York Telephone
1940	Barclay Mfg Corp	New York Telephone
	Bronx Lehigh Bldg	New York Telephone
	Bronx Term Bonded Warehouse Co Inc	New York Telephone
	Bronx Terminal Celery Co Exterior &	New York Telephone
	Capitol Wine & Spirit Corp	New York Telephone
	Consolidated Dougherty Card Co Inc	New York Telephone
	Cookes Foods Inc	New York Telephone
	Davis Harry liqrs	New York Telephone
	Dunlop Tire & Rubber Corp	New York Telephone
	Frigidaire Div Genl Motors Sales Carp Genl office	New York Telephone
	Svce	New York Telephone
	G & H Refrigtn Sales & Svce Corp	New York Telephone
	Gersen Geo H b	New York Telephone
	Hahr Walter b	New York Telephone
	Br wrhse	New York Telephone
	Indepndnt Salt Co ofc	New York Telephone
	Marshuetz S N C liqrs	New York Telephone
	Matisse Bros lenses	New York Telephone
	Pokrass Louis Liqrs	New York Telephone
	Standard Novelty Box Co Inc	New York Telephone
Standard Unbreakable Watch Crystals Inc	New York Telephone	
Wolfsie Sportswr Inc knit gds	New York Telephone	
Zierick Mfg Corp metl stmpgs	New York Telephone	

417 Gerard Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Glasstown Inc	Hill-Donnelly Information Services
2000	GASSTOWN INC	Cole Information Services
1993	GLASSTOWN INC	New York Telephone
1976	ALTYPE FIRE DOOR CORP	New York Telephone Company

FINDINGS

444 Gerard Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Omega	Hill-Donnelly Information Services
2000	OMEGA	Cole Information Services
1993	SAGE PLUMBING & HEATING CORP	New York Telephone
1971	RODNEY MAINTNCE CORP	New York Telephone
1965	RODNEY MAINTNCE CORP	New York Telephone Company
	RODNEY MAINTNCE CORP	New York Telephone Company
1961	FEM CORP GARGE	New York Telephone
	FEM CORP TAXIS	New York Telephone
	FLUR HERMAN L INS	New York Telephone
1956	FEM CORP GARGE	New York Telephone
	FEM CORP TAXIS	New York Telephone
	FLUR HERMAN L INS	New York Telephone
	FREDOR CAB INC	New York Telephone

445 Gerard Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	AAA Glass & Mirror Supis	Hill-Donnelly Information Services
	Jesse Shapiro & James Glass	Hill-Donnelly Information Services
2000	AAA GLS & MIR SUPLS	Cole Information Services
	JESSE SHAPIRO & JMS	Cole Information Services
	SHAPIRO & JAMES CRP	Cole Information Services
1993	A STONE SVCES	New York Telephone
	AAA GLASS & MIRROR SUPLS	New York Telephone
	ALL HANDS DISPOSABLE INC	New York Telephone
	JESSE SHAPIRO & JAMES GLASS CORP	New York Telephone
	SHAPIRO & JAMES JESSE GLASS CORP	New York Telephone
	STONE SERVICES INC	New York Telephone
1983	A STONE SVCES	New York Telephone
	JESSE SHAPIRO & JAMES INC	New York Telephone
	STONE SERVICES INC	New York Telephone
1976	KUSTOM AUTO COLLISION	New York Telephone Company
1971	LENOX MAINTENANCE CORP	New York Telephone
1965	SUPER ADJSTMT CO	New York Telephone Company
	SUPER OPERATING CORP	New York Telephone Company
1961	SUPER OPERATING CORP	New York Telephone
1956	SUPER OPERATING CORP	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1949	DELMART SVCE CORP GARAGE	New York Telephone
	DELMART SVCE CORP GARAGE	New York Telephone
1940	Gehn Harry auto parts	New York Telephone
	Harrigan Auto Parts Co Inc	New York Telephone
	Philco Sales & Svce Corp radios	New York Telephone
1927	Gehn Harry Auto Co	New York Telephone

RIVER AVE

390 RIVER AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Schiff Bernard r	New York Telephone
	Sherman Max S r	New York Telephone

400 RIVER AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Hinrichs Robt P r	New York Telephone

River Avenue

445 River Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Biesenthal I C r	New York Telephone
	Corsin E H Lewinski Dr r	New York Telephone
	Fisk Franklin Dr r	New York Telephone
	Fisk Franklin Dr r	New York Telephone
	Fiske Franklin D O office	New York Telephone
	Residence	New York Telephone
	Residence	New York Telephone
	Fiske Franklin D O office	New York Telephone
	Friedlander Geo S r	New York Telephone
	Goldwater Henry r	New York Telephone
	Jacoby Philip S r	New York Telephone
	Kiene Wm O C r	New York Telephone
	King I Strickland r	New York Telephone
	Leit Frances Mrs r	New York Telephone
	Leit Gertrude Miss r	New York Telephone
	Mayer Philip r	New York Telephone
	Mc Hvaine Ruth Miss r	New York Telephone
	Morrow Alice r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Naimska Zofia Miss r	New York Telephone
	Schultz O R r	New York Telephone
	Weed R W r	New York Telephone

RIVER DR

400 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Applebaum Ralph r	New York Telephone
	Walton Elizabeth Miss r	New York Telephone
	Vassar Geo W r	New York Telephone
	Taber E W Miss r	New York Telephone
	Slattery Lawrence J r	New York Telephone
	Reidy Richard r	New York Telephone
	Reidy Catherine M Mrs r	New York Telephone
	Potter Edw r	New York Telephone
	Lincoln Edmond E r	New York Telephone
	Lincoln Edmond E r	New York Telephone
	Lawson Robt Mrs r	New York Telephone
	Knight Fred S r	New York Telephone
	Jedel M Mrs r	New York Telephone
	Hershfield R N r	New York Telephone
	Fuller Robt H r	New York Telephone
	Fowler Court Apts	New York Telephone
	Yelland Wm H r	New York Telephone
	Borden Mary Mrs r	New York Telephone
	Cohen Nathan r	New York Telephone

404 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Tilson Frank H r	New York Telephone
	Bailey Jas S Jr Mrs r	New York Telephone
	Spielberg Harold r	New York Telephone
	Simon Robert E	New York Telephone
	Residence	New York Telephone
	Modra Roman L I	New York Telephone
	Gould Harry r	New York Telephone
	Elman Saul r	New York Telephone
	Blum Henri r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	White Thos r	New York Telephone
	Williams Roger Butler Jr r	New York Telephone
	Amdur S r	New York Telephone
	Strathmore The	New York Telephone

410 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1993	REINHOLD S	New York Telephone
1927	Stephens Anna C Mrs r	New York Telephone
	Valentine Laura Miss r	New York Telephone
	Tobin H A r	New York Telephone
	Black Lula Miss r	New York Telephone
	Black Mary Miss r	New York Telephone
	Burrows F W r	New York Telephone
	Chave W G r	New York Telephone
	Constantian Raphael Dr r	New York Telephone
	Ford Jean r	New York Telephone
	Frank Meyer r	New York Telephone
	Frank Sam r	New York Telephone
	Jones Ruth B Miss r	New York Telephone
	Klion Saml M r	New York Telephone
	Lewis B Palmer CS	New York Telephone
	Residence	New York Telephone
	Luckstone Harold C r	New York Telephone
	Luckstone Isidore studio	New York Telephone
	Luckstone Maurice E r	New York Telephone
	Mooney Paul C r	New York Telephone
	Perlman J M r	New York Telephone
	Phillips Leonore Miss r	New York Telephone
	Phillips Nettie Miss r	New York Telephone
	Ring Geo J r	New York Telephone
	Rosen Zara B Mrs ins	New York Telephone
	Sandberg Bertha r	New York Telephone
	Stenz B F r	New York Telephone
	Willard W R r	New York Telephone

414 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Murdock Beatrice E T Mrs r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Merrill Marion C Mrs r	New York Telephone

415 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Sigma Chi Fraternity	New York Telephone

417 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Goodman David C r	New York Telephone
	Grant John L r	New York Telephone
	Grant Louis M r	New York Telephone
	Grant Margery F Miss r	New York Telephone
	Harrison Rebecca Miss r	New York Telephone
	Hurd Chas F Jr r	New York Telephone
	Johnson Walter E r	New York Telephone
	Keeley Wm J r	New York Telephone
	Lissman Edw Rev r	New York Telephone
	Ludington R B Dr r	New York Telephone
	Oakley H Wayne r	New York Telephone
	Sakamoto S r	New York Telephone
	Tobin M r	New York Telephone
	Van Ness Frank H r	New York Telephone
	Wilson W J Jr r	New York Telephone
	Amer Vault Co Bklyn	New York Telephone
	Night & Sunday calls	New York Telephone
	Arrowood S D r	New York Telephone
	Bry Louis r	New York Telephone
	Cliff Haven Apts	New York Telephone
	Couch John R Mrs r	New York Telephone
	Friedman Jos r	New York Telephone
	Gibbons J M Dr r	New York Telephone
	Gilligan Edw A r	New York Telephone
	Goldberg Isidore r	New York Telephone

418 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Heidelberg Morris H r	New York Telephone

FINDINGS

420 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Markel Michael r	New York Telephone
	Mayer Clarence S r	New York Telephone
	Michelman I Mrs r	New York Telephone
	Miller Harris r	New York Telephone
	Pauly Hedwig Mrs r	New York Telephone
	Pearsall Harry C r	New York Telephone
	Perrow J r	New York Telephone
	Sanborn James F r	New York Telephone
	Schappert Chas L r	New York Telephone
	Schere R Richard r	New York Telephone
	Smith Ada C Mrs r	New York Telephone
	Strasbourg Minnie Z Mrs r	New York Telephone
	Udell Jerome I r	New York Telephone
	Ulen Earl C r	New York Telephone
	Underwood K S r	New York Telephone
	Weinstein Saul J r	New York Telephone
	Weinstein Wm J lwyr	New York Telephone
	Residence	New York Telephone
	Witt Max A r	New York Telephone
	Wolff M bonds	New York Telephone
	Residence	New York Telephone
	Wolfsohn Leopold piano studio	New York Telephone
	Wolfsohn Viola Miss artiste	New York Telephone
	Ackermann A Henry r	New York Telephone
	Baldwin B J r	New York Telephone
	Barnett Saml r	New York Telephone
	Bellamore David G r	New York Telephone
	Bergstein Adolph r	New York Telephone
	Berwald A H r	New York Telephone
	Biers Louis D r	New York Telephone
	Residenc	New York Telephone
	Bloch Adolph lwyr	New York Telephone
	Bloch Henry lwyr	New York Telephone
	Residence	New York Telephone
	Blum Morris r	New York Telephone
	Blumlein Arthur Mrs r	New York Telephone
	Broderick Anne M Mrs r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Carroll Peter Jas	New York Telephone
	Del Valle Carlo M MD r	New York Telephone
	Dickinson H B r	New York Telephone
	Frankel Fred r	New York Telephone
	Hall Lewis B Jr r	New York Telephone
	Hamilton Apts	New York Telephone
	Hirsch Leo r	New York Telephone
	Hirsh Nathan moving pictures	New York Telephone
	Residence	New York Telephone
	Hohenstein H r	New York Telephone
	Hubbell John E r	New York Telephone
	Humphrey Henry M r	New York Telephone
	Isaacs Maurice plaiting	New York Telephone
	Residence	New York Telephone
	Kalman A L Mrs r	New York Telephone
	Kalman Dore r	New York Telephone
	Kalman Lester A r	New York Telephone
	Kann Geo E r	New York Telephone
	Kaufman M Zenn r	New York Telephone
	Kaufman May Zenn r	New York Telephone
	Kendall L Z r	New York Telephone
	Kross Isidor Dr off	New York Telephone
	Residence	New York Telephone
	Kuhne Paul r	New York Telephone
	Lavalle Helen Miss r	New York Telephone
	Lavat W C r	New York Telephone
	Lehrer Henry Dr dntst	New York Telephone
	Levis Robt P Mrs r	New York Telephone
	Residence	New York Telephone
	Levy Michael jeweler	New York Telephone

423 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Comptons Geo Brokaw	New York Telephone

425 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Alvord Gladys Miss r	New York Telephone
	Bach Phil M	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Residence	New York Telephone
	Berman Philip r	New York Telephone
	Bernard Agnes Mrs r	New York Telephone
	Butler Louis M r	New York Telephone
	Cowen Gertrude F	New York Telephone
	Curran Jas J r	New York Telephone
	Dalton W A coml supt Manh	New York Telephone
	Residence	New York Telephone
	Devaney Thos F r	New York Telephone
	Eggert W F r	New York Telephone
	Force A E r	New York Telephone
	Frese Fred r	New York Telephone
	Friml Rudolpl r	New York Telephone
	Fullerton Edw Darcy r	New York Telephone
	Gerson Louis M r	New York Telephone
	Gluck Moses r	New York Telephone
	Glucksman Harry L r	New York Telephone
	Goldberg Shepard J Mrs r	New York Telephone
	Goldstein M Mme r	New York Telephone
	Greenfield Harry r	New York Telephone
	Greenwald Jerome E r	New York Telephone
	Grey Marie r	New York Telephone
	Gruner Clarence E r	New York Telephone
	Haberman Wm r	New York Telephone
	Residence	New York Telephone
	Holmes Bayard P lwyr	New York Telephone
	Jacobs V A r	New York Telephone
	Katz Saml r	New York Telephone
	Kinsie Paul M r	New York Telephone
	Klinkowstein M Mrs r	New York Telephone
	Korn Fannie Mrs r	New York Telephone
	Korn Harold I r	New York Telephone
	Landesman Ernest W r	New York Telephone
	Lintz M H r	New York Telephone
	Man Letchie Robt M r	New York Telephone
	Marks Celia F r	New York Telephone
	Matthews Frank C Dr ofc	New York Telephone
	Mead Marcia arch	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Melcher Margaret S Dr r	New York Telephone
	Mellon Geo W MD r	New York Telephone
	Meyer Morris r	New York Telephone
	Minsky Morton r	New York Telephone
	Minsky Ruth G r	New York Telephone
	Mougenthau Eugene r	New York Telephone
	Morris Clayton r	New York Telephone
	Muller Harold C DDS off	New York Telephone
	Nicols Julia Mrs r	New York Telephone
	Norton A Warren r	New York Telephone
	O Brien Wm r	New York Telephone
	Peel John P r	New York Telephone
	Pettit Carolyn Mrs r	New York Telephone
	Peyser Kaufman r	New York Telephone
	Platt Murray M r	New York Telephone
	Quinn I M r	New York Telephone
	Raffloer Ernest Mrs r	New York Telephone
	Raffloer W D r	New York Telephone
	Rebbane Fred W r	New York Telephone
	Resor R P r	New York Telephone
	Rice Nathaniel J r	New York Telephone
	Robinson Abbot S r	New York Telephone
	Rosen Harry E r	New York Telephone
	Rosenbaum Gustav r	New York Telephone
	Rudd Margaret Miss r	New York Telephone
	Sackheim Ida Mrs r	New York Telephone
	Residence	New York Telephone
	Schubart Henry A	New York Telephone
	Schwartz Benj r	New York Telephone
	Seeman Fredk R r	New York Telephone
	Shroyer Geo E r	New York Telephone
	Simons Dorothy r	New York Telephone
	Smith Chas V r	New York Telephone
	Springer Mordecai P r	New York Telephone
	Stecker Jack r	New York Telephone
	Sterling E M r	New York Telephone
	Street A W Mrs r	New York Telephone
	Residence	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Sturtz Samuel lwyr	New York Telephone
	Swain Henry D Mrs r	New York Telephone
	Tannenbaum Harold	New York Telephone
	Tannenbaum Max rl est	New York Telephone
	Residence	New York Telephone
	Tannenbaum Wm	New York Telephone
	Van Pelt Wm D atty	New York Telephone
	Warder Anna I Mrs r	New York Telephone
	Residence	New York Telephone
	Weber Jos lwyr	New York Telephone
	Wells Clifton K r	New York Telephone
	Wells Morgan C r	New York Telephone
	Wollheim Saml r	New York Telephone

431 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Bartnett W J r	New York Telephone
	Larimore Louise D Dr r	New York Telephone
	Taylor Jas A Mrs r	New York Telephone
	Brockett Francis S r	New York Telephone
	Brown Renie r	New York Telephone
	Ferris Theodore E r	New York Telephone
	Gwalter L Ivimy Miss r	New York Telephone
	Larimore D T Mrs r	New York Telephone
	Smith Alex r	New York Telephone
	Larimore Louise D Dr r	New York Telephone
	Lecatis A r	New York Telephone
	Leeds Edw L r	New York Telephone
	Mc Court James r	New York Telephone
	Neiman Max r	New York Telephone
	Philips Fredericka P Mrs r	New York Telephone
	Seager Ilka K r	New York Telephone

432 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Hirsch Eugenie Mrs r	New York Telephone

FINDINGS

434 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Schlesinger Julius CPA	New York Telephone
	Aigner Martin r	New York Telephone
	Residence	New York Telephone
	Schooley Ella Miss r	New York Telephone

435 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Schauffler Frederick H	New York Telephone
	Shenk Jos r	New York Telephone
	Bushman Edw L r	New York Telephone
	Callender Jas P r	New York Telephone
	Clark Wm M r	New York Telephone
	Colter Jos r	New York Telephone
	Germain Max r	New York Telephone
	Lasdon Milton A r	New York Telephone
	Lasdon Oscar r	New York Telephone
	Lasdon Saml D r	New York Telephone
	Mc Guire Jos Hubert r	New York Telephone
	Rumely Edw A r	New York Telephone
	Residence	New York Telephone

436 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Residence	New York Telephone
	Nagel Harold DDS	New York Telephone

440 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Sweeney Winfield H r	New York Telephone
	Viola Emily Mme beauty parlor	New York Telephone
	Residence	New York Telephone
	Strauss L L elec signs	New York Telephone
	Stapleton Chas W r	New York Telephone
	Simon Morton r	New York Telephone
	Silverman J r	New York Telephone
	Ryan Jas L r	New York Telephone
	Royer Harry B r	New York Telephone
	Robinson Clark r	New York Telephone

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Ritchie J W r	New York Telephone
	Riegger Constantin r	New York Telephone
	Paterno Apt	New York Telephone
	Moore Florence Miss r	New York Telephone
	Macnamara E J r	New York Telephone
	Lewis Phyllis A Mrs r	New York Telephone
	Landers Marsden H r	New York Telephone
	Kohn Stuart M r	New York Telephone
	Ingalls Will C r	New York Telephone
	Amos B F r	New York Telephone
	Atteridge Harold r	New York Telephone
	Brandon Stuart K r	New York Telephone
	Elias M tailor	New York Telephone
	Hazen Elizabeth S r	New York Telephone

445 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Jacoby Philip S r	New York Telephone
	Kiene Wm O C r	New York Telephone
	King I Strickland r	New York Telephone
	Leit Frances Mrs r	New York Telephone
	Leit Gertrude Miss r	New York Telephone
	Mayer Philip r	New York Telephone
	Mc Hvaine Ruth Miss r	New York Telephone
	Morrow Alice r	New York Telephone
	Naimska Zofia Miss r	New York Telephone
	Schultz O R r	New York Telephone
	Weed R W r	New York Telephone
	Biesenthal I C r	New York Telephone
	Corsin E H Lewinski Dr r	New York Telephone
	Fisk Franklin Dr r	New York Telephone
	Fisk Franklin Dr r	New York Telephone
	Fiske Franklin D O office	New York Telephone
	Residence	New York Telephone
	Residence	New York Telephone
	Fiske Franklin D O office	New York Telephone
	Friedlander Geo S r	New York Telephone
	Goldwater Henry r	New York Telephone

FINDINGS

461 RIVER DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1927	Dowie Wm G r	New York Telephone

FINDINGS

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

<u>Address Researched</u>	<u>Address Not Identified in Research Source</u>
100 E 144	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1940, 1931, 1927
100 E 144TH	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940
101 E 144	2014, 2010, 2005, 2000, 1993, 1983, 1940, 1931, 1927
101 E 144TH	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1931, 1927
110 E 144TH	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1927
120 E 144	2014, 2010, 2005, 2000, 1940, 1931, 1927
120 E 144TH	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1931, 1927
120 E 144TH ST	2014, 2010, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
120 East 144 Street	2014, 2010, 1931, 1927
121 East 144 Street	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
325 Exterior St	2014, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
325 Exterior St	2014, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
355 Exterior St	2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
355 Exterior St	2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
385 EXTERIOR	2014, 2010, 2005, 2000, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
385 Gerard Avenue	2014, 2010, 1931, 1927
390 RIVER AVE	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
399 EXTERIOR	2014, 2010, 2005, 2000, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
399 EXTERIOR ST	2014, 2010, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
399 Exterior St	2014, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
399 Exterior St	2014, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
400 RIVER AVE	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
400 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931

FINDINGS

Address Researched

Address Not Identified in Research Source

404 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
410 RIVER DR	2014, 2010, 2005, 2000, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
414 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
415 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
417 GERARD AVE	2014, 2010, 1983, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
417 Gerard Avenue	2014, 2010, 1983, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
417 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
418 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
420 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
423 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
425 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
431 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
432 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
434 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
435 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
436 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
440 EXTERIOR	2014, 2010, 2005, 2000, 1971, 1961, 1940, 1931, 1927
440 EXTERIOR ST	2014, 2010, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1927
440 RIVER DR	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931
441 EXTERIOR	2014, 2010, 2005, 2000, 1993, 1956, 1949, 1940, 1931, 1927
441 EXTERIOR ST	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1931, 1927
441 River Avenue	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927
444 Gerard Avenue	2014, 2010, 1983, 1976, 1949, 1940, 1931, 1927
445 EXTERIOR	2014, 2010, 2005, 2000, 1993, 1940, 1931, 1927
445 Gerard Avenue	2014, 2010, 1931
445 Maj Wm Deegan Boulevard	2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931, 1927

FINDINGS

Address Researched

445 River Avenue

445 RIVER DR

449 EXTERIOR ST

461 RIVER DR

Address Not Identified in Research Source

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1931, 1927

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1956, 1949, 1940, 1931

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched

404 Exterior Street

Address Not Identified in Research Source

2014, 2010, 2005, 2000, 1993, 1983, 1976, 1971, 1965, 1961, 1940, 1931, 1927

APPENDIX K

Environmental Lien Search

404 Exterior Street

404 Exterior Street
Bronx, NY 10451

Inquiry Number: 5589479.7
March 15, 2019

EDR Environmental Lien and AUL Search

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

404 Exterior Street
404 Exterior Street
Bronx, NY 10451

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found Not Found

RESEARCH SOURCE

Source 1:

New York City Register of Deeds
Bronx, NY

PROPERTY INFORMATION

Deed 1:

Type of Deed: Indenture
Title is vested in: Rocket Jewelry Box Inc
Title received from: 101 East 144th Street Corp
Deed Dated: 9/4/1969
Deed Recorded: 9/11/1969
Book: 116
Page: 217
Volume: NA
Instrument: NA
Docket: NA
Land Record Comments: see exhibit
Miscellaneous Comments: NA

Legal Description: see exhibit

Legal Current Owner: Rocket Jewelry Box Inc

Parcel # / Property Identifier: Block: 2351 Lot: 1

Comments: see exhibit

Deed Exhibit 1

Dr.
6050

RF 29 1/67 Standard N.Y.H.T.U. Form 8002 Bargain and Sale Deed, with Covenant against Grantor's Acts - Individual or Corporation (single Sheet)

CONSULT YOUR LAWYER BEFORE SIGNING THIS INSTRUMENT — THIS INSTRUMENT SHOULD BE USED BY LAWYERS ONLY.

REEL 116 PAGE 217

THIS INDENTURE, made the 4th day of September, nineteen hundred and sixty-nine

BETWEEN

101 EAST 144th STREET CORP., a New York Corporation
having its principal office at #101 East 144th Street, The Bronx, New York,

party of the first part, and ROCKET JEWELRY BOX, INC. a domestic

corporation and its principal office at 172-174 E 144th Street, Bronx, New York

party of the second part,

WITNESSETH, that the party of the first part, in consideration of Ten Dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Borough and County of the Bronx, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the easterly side of Major Deegan Boulevard (Exterior Street) and the northerly side of East 144th Street; thence **EASTERLY** along the northerly side of East 144th Street, 100.10 feet;
thence **NORTHERLY**, parallel with the easterly side of Major Deegan Boulevard, 81.90 feet;
thence **WESTERLY** along a line which forms an angle of 73 degrees 20 minutes 30 seconds on its southerly side with the last mentioned course, 104.38 feet to the easterly side of Major Deegan Boulevard;
thence **SOUTHERLY** along the easterly side of Major Deegan Boulevard, 47.46 feet to the corner aforesaid, the point or place of Beginning.

Said Premises now being known as and by the Street Number 404 Exterior Street.

The premises herein conveyed shall not be used as a body and fender automobile repair shop for a period of five years from the date of this instrument.

This conveyance is made with the unanimous consent of the shareholders of the party of the first part.

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof; TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises; TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid. AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose. The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF:

101 EAST 144th STREET CORP.,

[Signature]

BY:

[Signature]

ALFRED L. PALLADINO, President

REEL 116 218

STATE OF NEW YORK, COUNTY OF

On the day of 19 , before me personally came

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that executed the same.

STATE OF NEW YORK, COUNTY OF

On the day of 19 , before me personally came

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that executed the same.

REAL ESTATE TRANSFER TAX STATE OF NEW YORK Dept of Taxation SEP 11 '69 & Finance 60.50

STATE OF NEW YORK, COUNTY OF Brown

On the 4 day of September 19 69, before me personally came Alfred L. Palladino to me known, who, being by me duly sworn, did depose and say that he resides at No. 135 MacKay Drive, Tenafly, New Jersey that he is the President of 101 East 144th Street Corp.

the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation, and that he signed his name thereto by like order.

STATE OF NEW YORK, COUNTY OF

On the day of 19 , before me personally came

the subscribing witness to the foregoing instrument, with whom I am personally acquainted, who, being by me duly sworn, did depose and say that he resides at No.

that he knows to be the individual described in and who executed the foregoing instrument; that he, said subscribing witness, was present and saw execute the same; and that he, said witness, at the same time subscribed his name as witness thereto.

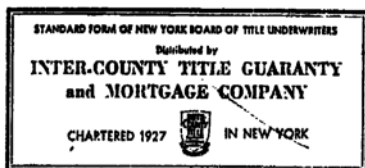
MILTON SILVER Notary Public in and for the State of New York No. 249 257 Exp. 03-30-1970

Bargain and Sale Deed

With Covenant Against Grantor's Acts

Title No. 706 5976

TO



11104 SU 1169

SECTION 9 BLOCK 205-1 LOT 1 COUNTY OR TOWN Brown

Revised At Request of INTER-COUNTY Title Guaranty and Mortgage Company RETURN BY MAIL TO

Stanky M. Katz, Esq, 99 Park Avenue New York, N.Y. Reg No. 10016

RECORDED AT THE OFFICE OF THE TITLE GUARANTY COMPANY

Form with recording details: OFFICE OF CITY REGISTER, BROOKLYN, REGISTRATION NUMBER, TAX PAID 4995, REC. FEE, SEC. \$, EST. #.

APPENDIX L

Resumes

Ryan Manderbach, CHMM

Associate

Environmental Engineering & Site Assessments



15 years in the industry

Mr. Manderbach has experience in New York, New Jersey, Massachusetts, Maine, Rhode Island, New Hampshire, and Connecticut. His recent experience includes New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup, Voluntary Cleanup and Spill Programs, and New York City Office of Environmental Remediation (OER) E-designated site investigation, and remediation. He has managed and performed Phase I and II Environmental Site Assessments; Underground Storage Tank (UST) removals and closures; soil vapor intrusion investigations; and site investigations and remediation. He also has extensive experience with Hazard Ranking System (HRS) evaluations, site assessments, removal actions, and emergency response activities under the EPA Regions I and II Superfund program.

Selected Projects

- Brownfield Redevelopment, 520 West 41st Street, New York, NY
- Riverside Parcel 1, 3, 4 and 5, Mixed-Use Development, New York, NY
- Brownfield Redevelopment, 267-273 West 87th Street, New York, NY
- Brownfield Redevelopment, 225 33rd Street, Brooklyn, NY
- River Place Residential, SMP Implementation, New York, NY
- Mixed-Use Educational/Residential Development, New York, NY
- Public Safety Answering Center (PSAC) II, Bronx, NY
- American Copper Buildings (616 First Avenue), New York, NY
- Environmental Assessments at 430 East 92nd Street, New York, NY
- Environmental Assessments at 125th Street and Lenox, New York, NY
- Hotel at 70 Park Avenue, New York, NY
- Environmental Due Diligence at Mixed-Use Development, 85 Jay Street, Brooklyn, NY
- 346 Broadway Due Diligence, New York, NY
- Liberty Brass Site, 38-01 Queens Boulevard, Long Island City, NY
- Environmental Remediation, 42 West Street Residential, Brooklyn, NY
- Brownfield Redevelopment, 335 Bond Street, Brooklyn, NY
- Residences at 540 West 21st Street, New York, NY
- International Leadership Bronx Charter School, Bronx, NY
- President Street Properties, Brooklyn, NY
- Residential Development, 43-30 24th Street, Long Island City, NY
- Mixed-Use Condominium, 505-513 West 43rd Street, New York, NY
- 685 First Avenue, New York, NY
- Columbia University, Manhattanville Development, New York, NY
- The Shops at Atlas Park, Glendale, NY
- 536 West 41st Street, New York, NY
- Shore Parkway, Brooklyn, NY
- 100 West 125th Street, New York, NY
- 11 North Moore Street, New York, NY

Education

B.A., Environmental Analysis and Policy
Boston University

Professional Registration

Certified Hazardous Materials Manager (CHMM)

40 Hour HAZWOPER

Affiliations

New York Building Congress (NYBC),
Young Professionals Committee

American Council of Engineering Companies of New York (ACEC NY) –
Emerging Leaders Committee

Ryan Manderbach, CHMM

- 290 West Street, New York, NY
- City University of New York (CUNY), John Jay College Expansion, New York, NY
- Queens West Development, Long Island City, NY
- United Nations Capital Master Plan, New York, NY
- Former Air Products and Chemicals, Inc. Facility, Middlesex, NJ
- Lower Manhattan Indoor Dust Test and Clean Program, New York, NY
- Former Buckbee-Mears Facility, Cortland, NY
- Old Landfill, Norton, MA
- Boulter Farm Area, Cumberland, RI
- Hollingsworth & Vose Co., Walpole, MA
- Chlor-Alkali Facility (Former), Berlin, NH
- Limerick Mill Complex, Limerick, ME
- Danielson Pike Chlorinated Solvent Sites, Scituate, RI
- Tiogue Lake Sediment Contamination Site, Coventry, RI
- Atlas Copco Sites, Holyoke, MA
- Fisherville Mill, Grafton MA
- Hurricane Katrina Federal Disaster Response, New Orleans, LA
- Hurricane Ike Federal Disaster Response, Pasadena, TX

BRIAN GOCHENAUR, QEP

SENIOR PROJECT MANAGER

ENVIRONMENTAL SCIENTIST

Mr. Gochenaur is an environmental project manager whose experience includes environmental due diligence, site investigation and remediation, fuel oil storage tank investigation and removal, soil vapor intrusion assessments, in-situ remedial technology, spill closure, vapor barrier and sub-slab depressurization system design and construction, emergency response, environmental and geotechnical site investigations, and health and safety monitoring. He has extensive experience with the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup, Voluntary Cleanup and Spill Programs and New York City Department of Environmental Protection (NYCDEP) "E" Designated and New York City Voluntary Cleanup Program (BCP) sites. His areas of expertise include Phase I Environmental Site Assessments, Phase II Site Investigations, and environmental consulting and oversight on large scale construction projects.

SELECTED PROJECTS

- 440 Washington Street, E-Designated services, New York, NY
- 3514 Surf Avenue, Tall Residential and Retail Building, Brooklyn, NY
- ARO 242 West 53, Tall Residential Building, New York, NY
- NY Aquarium Shark Exhibit, Soil Characterization and Excavation Oversight, Coney Island Neighborhood, Brooklyn, NY
- 60 West Street, Site Investigation and Redevelopment, Brooklyn, NY
- 535 4th Avenue, BCP Auto Repair Cleanup and Redevelopment, Brooklyn, NY
- 1525 Bedford Avenue, BCP Gas Station Cleanup and Redevelopment, Brooklyn, NY
- 220 Eleventh Avenue, Residential Building, New York, NY
- 432 Rodney Street, Residential Building, Brooklyn, NY
- 563 Sackett Street, Brooklyn, NY
- 362 West 125th Street, Residential Building, New York, NY
- Bedford Armory Redevelopment, Brooklyn, NY
- 268 West Street, BCP Redevelopment of Former Commercial and Industrial Site, New York, NY
- 110 125th Street, Soil Excavation and Remediation, New York, NY
- Former Roseland Ballroom Redevelopment, Soil Characterization and Excavation Oversight, New York, NY
- 42 Crosby Street, "E" Designated Site Investigation and Remediation, New York, NY
- New York School Construction Authority, Various Locations, In-House Environmental Consulting, Five Boroughs of New York City
- EZ Serve Portfolio, GE Capital, Various Phase II Site Investigations, FL, GA, LA, and MS
- Beth Elohim Child Daycare Center, Lead Based Paint Abatement, Brooklyn, NY
- Price Battery, Environmental Protection Agency (EPA) Lead Fallout Superfund Site, Hamburg, PA



EDUCATION

B.S., Environmental
Science
University of Florida

PROFESSIONAL REGISTRATION

Qualified Environmental
Professional (QEP)
certified by the Institute of
Professional
Environmental Practice

40-Hour OSHA
(HAZWOPER)

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BRIAN GOCHENAUR, QEP

- Clark Portfolio, GE Capital, Various Phase II Locations, MI, IL, ID, and OH
- Tops Plaza Portfolio, Prudential Real Estate Investors, Various Phase II Locations, NY
- Cingular Wireless Portfolio, Cingular Wireless, Various Locations Phase I and II Locations, WA
- Queens Center Mall Expansion, Remedial Oversight, Elmhurst, NY
- Soka Gakkai International-USA, Cultural Center, Brooklyn, NY

JULIA LEUNG, PE

PROJECT ENGINEER

ENVIRONMENTAL ENGINEERING & WATER RESOURCES

Ms. Leung is an environmental engineer working in the New York Metro area. Her projects involve the investigation and assessment of environmental systems including physical/chemical processes, water chemistry, environmental system analysis, solid waste and water resources engineering, stormwater design and hydrology.

SELECTED PROJECTS

- Phase I ESA, Various Locations, NYC and Westchester County, NY
- Phase II ESI, 412 East 90th Street, New York, NY
- 420 Kent Avenue, Brooklyn, NY
- West and Watts Development, New York, NY
- 203 East 92nd Street, Mixed-Use Building, New York, NY
- BAM North Tower, Brooklyn, NY
- Phase II ESI, FedEx Distribution Facility (830 Fountain Avenue), Brooklyn, NY
- Waste Classification and Lead Delineation Investigation (261 Hudson Street), New York, NY
- Waste Classification Investigation (41-43 East 22nd Street), New York, NY
- Columbia University, Manhattanville Campus, New York, NY
- Riverside Building 5, New York, NY
- Condominium at 200 East 79th Street, New York, NY
- Mercedes Benz of Manhattan (536 West 41st Street), New York, NY
- Phase II ESI (627 Smith Street), Brooklyn, NY
- 340 Court Street, Brooklyn, NY



EDUCATION

M.E., Environmental Engineering
Cornell University

B.S., Biological Engineering
(Environmental Studies Concentration)
Cornell University

PROFESSIONAL REGISTRATION

Professional Engineer (PE)
in NY

10-Hour OSHA

Kyle Twombly

**Senior Staff Scientist
Environmental Engineering**



4 years in the industry

Mr. Twombly is a geologist with experience in New York City. His responsibilities include environmental and construction oversight, data and daily field report management, Phase II Environmental Site Investigations, waste characterizations, and remedial subsurface investigations involving soil, groundwater and soil vapor sampling.

Selected Projects

- Hudson Yards Redevelopment, environmental field oversight, New York, NY
- Sullivan Street Development, environmental field oversight, New York, NY
- 520 West 41st Street, groundwater sampling, New York, NY
- Greenpoint Landing, environmental and geotechnical field oversight, well gauging, Brooklyn, NY
- 601 Washington Street, environmental field oversight, New York, NY
- 521-539 4th Avenue, environmental field oversight, Brooklyn, NY
- 268 West Street, environmental field oversight, New York, NY
- Riverside Center Parcel 1, environmental field oversight, New York, NY
- 86 Fleet Street, Brooklyn, NY
- 416-420 Kent Avenue, environmental field oversight and waste characterization, Brooklyn, NY
- 551 Greenwich Street, remedial investigation including soil, groundwater and soil vapor sampling with report preparation, New York, NY
- 41 Kensico Drive, soil sampling, soil vapor sampling, remedial investigation report preparation, remedial action work plan report preparation, Mount Kisco, NY
- 335 Bond Street, well installation oversight, groundwater sampling, Brooklyn, NY
- Bush Terminal, waste characterization field coordination, Brooklyn, NY
- 450 Union Street, waste disposal oversight, well gauging, Brooklyn, NY
- Brooklyn Navy Yard Building 77, environmental field oversight, Brooklyn, NY
- 111 Varick Street, spill closure report preparation, New York, NY
- Horace Mann School, environmental and geotechnical field oversight, Bronx, NY
- Parcel B West, waste characterization, New York, NY
- 45-49 and 45-57 Davis Street, soil, groundwater and soil vapor sampling, Queens, NY
- 1120 Saint Johns Place, soil, groundwater and soil vapor sampling, Brooklyn, NY
- 225 3rd Street, well installation oversight, indoor air sampling, Brooklyn, NY

Education

B.S., Geoscience
University of Connecticut

Professional Registration

10-Hour OSHA
40-Hour OSHA HAZWOPER

Affiliations

Association of Environmental &
Engineering Geologists

Engineers Without Borders


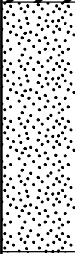
APPENDIX B

SOIL BORING LOGS

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001				
Location Bronx, NY				Elevation and Datum NA				
Drilling Company AARCO Environmental				Date Started 12/27/18		Date Finished 12/27/18		
Drilling Equipment Geoprobe 7822 DT				Completion Depth 30 ft		Rock Depth NA		
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 6	Undisturbed 0	Core 0
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 14		Completion NA	24 HR. 11.1	
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon				
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough				
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA					

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-30") Black to brown medium SAND, trace silt, trace fine gravel, coal, slag, coal ash, concrete (dry) [FILL]	1	1	MACROCORE	30/60	NA	0.0	Sampled RB01_0-2 at 9:30
		2					2.0	
		3					1.6	
		4					7.1	
		5					2.6	
	R2 (0-24") Brown medium SAND, some silt, trace fine gravel, brick, coal ash, slag (dry-moist) [FILL]	6	2	MACROCORE	24/60	NA		Sampled RB01_9-11 at 9:35
		7					0.4	
		8					0.5	
		9					1.3	
		10					1.0	
		11						
	R3a (0-8") Brown medium SAND, some silt, trace fine gravel, brick (moist) [FILL]	12	3	MACROCORE	26/60	NA		Petroleum like odors
	R3b (8-26") Gray to black fine SAND, trace silt, trace fine gravel, coal (wet) [FILL]	13					179	
		14					330	
		15					1015 425	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
	R4 No recovery	15 16 17 18 19 20	4	MACROCORE	0/60	NA	Sampled RB01_14-16 at 9:40	
	R5 No recovery	21 22 23 24	5	MACROCORE	0/60	NA		
	R6a (0-24") Gray, silty CLAY (wet)	25 26				1.2		Sampled RB01_25-27 at 9:45
	R6b (24-51") Reddish-brown, fine SAND (wet)	27 28	6	MACROCORE	54/60	0.3		
	R6c (51-54") Reddish-brown, medium SAND (wet)	29				0.0		
		30 31 32 33				0.0	End of boring at 30' bgs. MW01 installed at 20', 20-slot screen 5' to 20' screen	

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/26/18		Date Finished 12/26/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Veronica Zuluaga			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-24") Unconsolidated, brown to dark gray, medium SAND, some fine gravel, coal, coal ash, brick, concrete, (dry), [FILL]	1	1	MACROCORE	24/60	NA	0.6	Background PID level: 0.6 ppm Sampled RB02_0-2 at 13:25
		2					0.6	
		3					0.6	
		4						
		5						
	R2 (0-32") Medium consolidated, brown to gray, fine SAND, some fine gravel, trace silt, brick, coal, wood, (dry to moist), [FILL]	6	2	MACROCORE	32/60	NA	0.6	Sampled RB02_7-9 at 13:30
		7					0.6	
		8					0.6	
		9					0.6	
		10					0.6	
	R3a (0-16") Medium consolidated, brown, fine SAND, trace silt, coal, slag, (dry), [FILL] R3b (16-43") Medium consolidated, brown to gray, fine SAND, some silt, wood, concrete [FILL]	11	3	MACROCORE	43/60	NA	0.7	Sampled RB02_10-12 at 13:35 Sampled RB02_13-15 at 13:40
		12					0.7	
		13					0.7	
		14					0.7	
		15					0.7	

LANGAN

Log of Boring


RB02

Sheet

2

of

2

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-48") Very stiff, gray, silty CLAY, (moist)	15	4	MACROCORE	48/60	NA	
		16					0.5
		17					0.5
		18					0.5
		19					0.5
		20					0.5
		21					0.5
		22					0.5
		23					0.5
		24					0.5
		25					0.5
		26					0.5
		27					0.5
28	0.5						
29	0.5						
30	0.5						
31	0.5						
32	0.5						
33	0.5						
							End of boring at 20', Backfilled with cuttings/clean sand to surface grade.


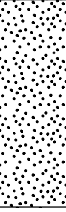
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/26/18		Date Finished 12/26/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.)		First 13.5	Completion 11.1
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon			
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Veronica Zuluaga			
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA				

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-36") Unconsolidated, dark brown, fine SAND, trace silt, trace fine gravel, coal, coal ash, concrete, (moist) [FILL]	1	1	MACROCORE	36/60	NA	2.2	Background PID level: 1.6 ppm
		2					2.4	
		3					2.6	
		4					120	
		5					161	
		6					2.9	
		7					3.1	
		8						
		9						
		10						
	R2 (0-32") Unconsolidated, dark brown, fine SAND, trace silt, trace fine gravel, coal, concrete, (moist) [FILL]	11	2	MACROCORE	32/60	NA	3.1	Sampled RB03_0-2 at 9:45
		12					3.7	
		13					2.6	
	R3 (0-18") Medium consolidated, black, fine gravel, trace fine SAND, coal, coal slag (wet) [FILL]	14	3	MACROCORE	18/60	NA	1.7	Sampled RB03_2-3 at 9:50
		15					1.5	
		16						
		17						
		18						
		19					28	Sampled RB03_10-12 at 9:55
		20					34	
		21					4.4	
		22					3.4	
		23						

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001						
Location Bronx, NY		Elevation and Datum NA						
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
 	R4a (0-6") Unconsolidated, black, fine SAND, some fine gravel, coal, (wet) [FILL]	15	4	MACROCORE	36/60	NA	5.2 5.9 8.2 7.2 2.8 4.3	Sampled RB03_17-18 at 10:00 Organic-like odor End of boring at 20' bgs, MW03 installed at 25', 20-slot screen from 10 to 25'.
	R4b (6-32") Medium consolidated, dark gray, silty fine SAND, trace clay, (wet)	16						
	R4c (32-36") Medium consolidated, dark gray, fine SAND, some silt, trace fine gravel (wet)	17						
		18						
		19						
		20						
		21						
		22						
		23						
		24						
		25						
		26						
		27						
		28						
		29						
		30						
		31						
		32						
		33						

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/21/18		Date Finished 12/21/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 13.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-36") Brown to gray to tan fine SAND, some silt, brick, coal (moist) [FILL]	0-36"	1	MACROCORE	36/60	NA	0.0	Sampled RB04_0-2 at 13:30
		1					0.0	
		2					0.0	
		3					0.0	
		4					0.0	
	R2 (0-48") Brown to orange fine SAND, trace silt, brick, coal, ash, slag (moist) [FILL]	4-48"	2	MACROCORE	48/60	NA	0.0	Sampled RB04_8-10 at 13:40
		5					0.0	
		6					0.0	
		7					0.0	
		8					0.0	
		9					0.0	
		10					0.0	
		11					0.0	
		12					0.0	
		13					0.0	
	R3a (0-8") Brown fine SAND, trace silt, trace clay, brick (moist-wet) [FILL]	13-13.8"	3	MACROCORE	20/60	NA	0.0	Sampled RB04_13-15 at 13:50
	R3b (8-20") Gray to black fine SAND, some silt, trace clay, trace fine gravel, brick (wet) [FILL]	13.8-20"					0.0	
		14					0.0	
		15					0.0	

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Log of Boring

RB04/RMW04

Sheet

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of

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
X	R4 (0-20") Gray to black fine SAND, some silt, trace clay, trace fine gravel, timber (wet) [FILL]	15	4	MACROCORE	20/60	NA	
		16					0.0
		17					
		18					
		19					0.0
		20					0.0
		21					0.0
		22					0.0
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

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Sampled RB04_ 18-20 at 14:00

End of boring at 20' bgs
RMW04 installed 24', 20-slot screen from 9' to 24'

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/21/18		Date Finished 12/21/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 21 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 5	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 12.3		Completion NA	24 HR. 12.2
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 4/5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-30") Black to brown to tan fine SAND, trace brick, asphalt, glass, concrete (moist) [FILL]	1	1	MACROCORE	30/48	NA	0.1	Sampled RB05_0-2 at 9:35
		2					0.1	
		3					0.1	
		4					0.1	
	R2 (0-10") Brown to tan fine SAND, concrete (moist) [FILL]	5	2	MACROCORE	10/48	NA	0.1	Sampled RB05_8-10 at 9:40
		6					0.1	
		7					0.1	
		8					0.1	
	R3 (0-20") Brown silty SAND, trace fine gravel, brick (moist) [FILL]	9	3	MACROCORE	20/48	NA	0.1	Sampled RB05_13-15 at 9:50
		10					0.1	
		11					0.1	
		12					0.1	
	R4 (0-20") Brown to black fine SAND, some silt, trace clay, trace fine gravel, brick, wood (moist-wet) [FILL]	13	4	MACROCORE	20/48	NA	0.1	
		14					0.1	
		15						

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Log of Boring

RB05/RMW05

Sheet

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of

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
R5 (0-38") Black to gray, fine SAND, some silt, trace clay, trace fine gravel, brick, coal, wood (wet) [FILL]		15	4		20/48		0.1	
		16					0.4	Switched to 5-foot sampler because shallower material caved in
		17						
		18	5	MACROCORE	38/60	NA	0.4	
		19					0.4	
		20					0.4	Sampled RB05_19-21 at 10:00
		21					0.4	End of boring at 21' bgs. MW05 installed at 23', 20-slot screen 8' to 23'
		22						
		23						
		24						
		25						
		26						
		27						
		28						
		29						
		30						
		31						
		32						
		33						

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001						
Location Bronx, NY		Elevation and Datum NA						
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
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		16						
		17						
		18						
		19						0.2
		20						0.2
		21						0.2
		22						
		23						
		24						
		25						
		26						
		27						
28								
29								
30								
31								
32								
33								

End of boring at 20' bgs,
Backfilled with cuttings/clean
sand to surface grade

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001	
Location Bronx, NY		Elevation and Datum NA	
Drilling Company AARCO Environmental		Date Started 12/20/18	Date Finished 12/20/18
Drilling Equipment Geoprobe 7822 DT		Completion Depth 24 ft	Rock Depth NA
Size and Type of Bit 2-inch direct push macrocore cutting shoe		Number of Samples	Disturbed 6 Undisturbed NA Core NA
Casing Diameter (in) NA	Casing Depth (ft) NA	Water Level (ft.) First 16	Completion NA 24 HR. 12.4
Casing Hammer NA	Weight (lbs) NA	Drop (in) NA	Drilling Foreman Nick Turro
Sampler 4-foot stainless steel macrocore sampler		Field Engineer Tyler Goodnough	
Sampler Hammer NA	Weight (lbs) NA	Drop (in) NA	

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	6-inch concrete slab	0						
	R1 (0-22") Black to brown medium SAND, trace brick (moist) [FILL]	1	1	MACROCORE	22/48	NA	0.0	Sampled RB07_0-2 at 13:00
		2					0.0	
		3					0.0	
	R2a (0-16") Brown coarse SAND, trace brick, trace medium sand, trace fine gravel (moist) [FILL]	4	2	MACROCORE	24/48	NA	0.0	Sampled RB07_6-8 at 13:30
	R2b (16-24") Brown medium SAND, some coarse sand, some silt, trace fine gravel (moist)	5					0.0	
		6					0.0	
	R3 (0-24") Brown medium SAND, some coarse sand, some silt, trace fine gravel (moist)	7	3	MACROCORE	24/48	NA	0.0	Sampled RB07_8-10 at 13:45
		8					0.0	
		9					0.0	
	R4a (0-8") Brown coarse SAND, some medium sand, some silt (moist)	10	4	MACROCORE	21/48	NA	0.0	
		11					0.0	
		12					0.0	
		13					0.0	
		14					0.0	
		15					0.0	

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Log of Boring **RB07/RMW07**

Sheet 2 of 2

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4b (8-11") Deep red coarse GRAVEL (moist)	15	4		21/48		0.0
	R4c (11-14") Brown coarse SAND, some medium sand, some silt (moist)	16					0.0
	R5 (0-10") Dark gray-black fine GRAVEL, some coarse sand, some medium sand (wet)	17-20	5	MACROCORE	10/48	NA	0.0
	R6a (0-22") Dark gray fine SAND, trace silt, trace clay (wet)	21-24	6	MACROCORE	22/48	NA	0.0
	R6b (22-24") Dark gray-black fine GRAVEL, some coarse sand, some fine sand (wet)	24					0.0
		25					0.0
		26					0.0
		27					0.0
		28					0.0
		29					0.0
		30					0.0
		31					0.0
		32					0.0
		33					0.0

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Petroleum-like odor

End of boring at 24' bgs.
MW07 installed at 24', 20-slot screen 4' to 24'

Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/27/18		Date Finished 12/27/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 16.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon			
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA				

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MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	4-inch concrete slab	0						
	R1 (0-30") Brown to tan medium SAND, trace silt, trace fine gravel, brick, concrete, coal ash (dry) [FILL]	1	1	MACROCORE	30/60	NA	0.0	Sampled RB08_0-2 at 12:45
		2					0.0	
		3					0.0	
		4					0.0	
	R2a (0-30") Brown fine SAND, trace silt, trace fine gravel, brick, coal (moist) [FILL]	5	2	MACROCORE	30/60	NA	0.0	Sampled RB08_10-12 at 12:50
		6					0.0	
		7					0.0	
		8					0.0	
		9					0.0	
		10					0.0	
	R3a (0-16") Brown fine SAND, trace silt, brick, coal, (moist-wet) [FILL]	11	3	MACROCORE	22/60	NA	0.0	Sampled RB08_12-14 at 12:55
		12					0.0	
		13					0.0	
		14					0.0	
	R3b (16-22") Gray silty CLAY	15					0.0	

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Log of Boring


RB08

Sheet

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2

Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001						
Location Bronx, NY		Elevation and Datum NA						
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
	R4 (0-44") Gray silty CLAY, trace fine sand (wet)	15	4	MACROCORE	44/60	NA	<p>Sampled RB08_14-16 at 13:00</p> <p>End of boring at 20' bgs. Backfilled with cuttings/clean sand to surface grade</p>	
		16						0.0
		17						0.0
		18						0.0
		19						0.0
		20						0.0
		21						
		22						
		23						
		24						
		25						
		26						
		27						
		28						
		29						
30								
31								
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/2/19		Date Finished 1/2/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 11.5 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 3	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	8-inch concrete slab	0						
	R1 (0-16") Brown to black medium SAND, some fine gravel, asphalt [FILL]	1	1	MACROCORE	16/60	NA	0.0	
	R2 (0-48") Brown to gray to tan to black medium SAND, trace brick, trace fine gravel, brick, slag [FILL]	6	2	MACROCORE	48/60	NA	0.0	
	R3 (0-20") Gray to brown medium SAND, trace fine gravel, brick, asphalt [FILL]	11	3	MACROCORE	18/18	NA	0.0	
		12					0.0	
		13					0.0	
		14					0.0	
		15					0.0	

End of Boring at 11.5' (refusal)
Backfilled with cuttings/clean sand to surface grade.
Step out boring RB09a advanced ~5' east

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/2/19		Date Finished 1/2/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 32 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 6		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First ∇ 18.5		Completion ∇ NA	24 HR. ∇ 19.4
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon			
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA				

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BLU/in	PID Reading (ppm)	
	6-inch concrete slab	0						
	R1 (0-30") Brown medium SAND, trace silt, trace fine gravel, asphalt (dry) [FILL]	1	1	MACROCORE	30/60	NA	0.0	Step-out ~5' east of RB09
		2					0.0	
		3					0.0	Sampled RB09_0-2 at 13:40
		4					0.0	
		5					0.0	
	R2a (0-18") Light brown fine SAND (dry) [FILL]	6	2	MACROCORE	30/60	NA	0.0	
		7					0.0	
		8					0.0	
	R2b (18-30") Black to gray medium SAND, some fine gravel, brick, concrete (dry) [FILL]	9					0.0	
		10					0.0	
		11					0.0	
	R3 (0-34") Brown medium SAND, trace silt, fine gravel, brick, coal, ash (moist) [FILL]	12	3	MACROCORE	34/60	NA	0.0	
		13					0.0	
		14					0.0	
		15					0.0	

Project		Project No.					
Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		170487001					
Location		Elevation and Datum					
Bronx, NY		NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
		15					
		16					
		17					
	R4a (0-6") Brown medium SAND, trace fine gravel, brick (moist) [FILL]	18	4	MACROCORE	32/60	NA	0.0
		18					7.2
	R4b (6-32") Gray medium SAND, trace silt (wet)	19					59.3
		19					657
		20					698
		20					1145
		21					
		21					Sampled RB09_19-21 at 13:45
		22					
	R5 (0-32") Gray to black medium SAND (wet)	22	5	MACROCORE	32/60	NA	1175
		23					7913
		24					1127
		24					966
		25					70.9
		25					25.9
		26					
	R6 (0-48") Gray to brown medium SAND (wet)	26					755
		27					507
		27					22.2
		28	6	MACROCORE	48/60	NA	12.4
		28					9.4
		29					7.6
		30					0.0
		30					0.0
		31					
		31					End of boring at 32' bgs. MW09 installed at 27', 20-slot screen 17' to 22'
		32					
		33					

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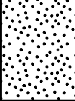
Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/8/19		Date Finished 1/8/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 35 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 7	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 24		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	12-inch concrete slab	0						
	R1 (0-18") Brown to tan to gray fine SAND, trace medium sand, find gravel (dry) [FILL]	1	1	MACROCORE	18/60	NA	0.7	Sampled RB10_0-2 at 11:30
		2					0.7	
		3					0.5	
	R2 (0-24") Brown to tan fine SAND, trace medium sand, fine gravel, concrete, brick, coal (moist) [FILL]	4	2	MACROCORE	24/60	NA		Faint chemical like odor
		5					0.4	
		6					0.8	
	R3 (0-40") Brown fine SAND, fine gravel, brick, coal (moist) [FILL]	7	3	MACROCORE	40/60	NA	0.5	
		8					0.5	
		9					0.9	
		10					1.8	
		11					20.9	
		12					5.1	
		13					1.2	
		14					1.9	
		15					1.5	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
R4a (0-28") Brown fine SAND, trace medium sand, fine gravel, brick, coal (moist) [FILL]		15						
		16				3.8		
		17				3.7		
		18	4	MACROCORE	48/60	NA	4.1	
		19				2.0		
		20				20.7		
		21				110	Petroleum like odors and staining	
		22				686.4		
		23				106.1	Sampled RB10_18-20 at 11:35	
		24	5	MACROCORE	12/60	NA	159.3	
		25						
		26						
		27						
		28						
		29						
R5 (0-12") Black, fine SAND, trace medium sand, some fine gravel, brick, ceramic tile (wet) [FILL]		30				39.4		
		31				77.6		
		32				140.8	Petroleum like odors and staining	
		33						
		34						
		35						
		36						
R6 (0-20") Black fine SAND, trace medium sand, some fine gravel, brick, glass (wet) [FILL]		37				51.4		
		38				56.2		
		39				208	Petroleum like odors and staining	
		40						
		41						
		42						
		43						
R7a (0-8") Gray fine SAND (wet)		44				12.1		
		45				5.0	Petroleum like odors	
		46				3.4		
		47				1.4		
		48	7	MACROCORE	54/60	NA	1.4	
		49					0.9	
	50					2.3	Sampled RB10_33-35 at 11:40	
	51					1.7		

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R7b (8-54") Reddish brown fine SAND (wet)	34	7		54/60		2.4
		35					2.9
		36					2.2
		37					
		38					
		39					
		40					
		41					
		42					
		43					
		44					
		45					
		46					
		47					
		48					
		49					
		50					
		51					
		52					
		52.5					

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
		15					
	R4a (0-6") Brown medium SAND, trace silt, trace fine gravel, coal (wet) [FILL]	16					
	R4b (6-48") Black to brown medium SAND, some fine sand, trace silt (wet)	17	4	MACROCORE	48/60	NA	2.3
		18					33.6
		19					740
		20					661
		21					1321
		22					534
	R5 (0-48") Black to brown medium SAND (wet)	23	5	MACROCORE	48/60	NA	931
		24					511
		25					1052
		26					1258
		27					208
		28					40.0
		29					16.4
		30					28.6
		31					32.1
	R6 (0-30") Brown medium SAND, trace fine gravel (wet)	32	6	MACROCORE	50/60	NA	302
		33					704
							741
							30.7
							22.2
							12.2
							4.1
							5.6
							0.0

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

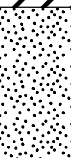



Petroleum like odors and staining
 Sampled RB11_28-30 at 10:40
 End of boring at 30' bgs.
 MW11 installed at 28', 20-slot screen 13' to 28'

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 12/26/18		Date Finished 12/26/18	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 13		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon			
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Veronica Zuluaga			
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA				

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	4-inch concrete slab	0						
	R1 (0-20") Brown, medium SAND, some fine gravel, brick, concrete, coal (dry) [FILL]	1	1	MACROCORE	20/60	NA	3.2	Background PID level: 1.8 ppm Sampled RB12_0-2 at 11:55
		2					1.4	
		3					0.9	
	R2a (0-4") Brown, fine SAND, some silt, brick, coal (dry) [FILL] R2b (4-14") Gray, fine SAND, coal slag, (dry) [FILL]	4	2	MACROCORE	30/60	NA	2.6	Sampled RB12_8-9 at 12:00 Petroleum-like odors
		5					3.7	
		6					6.8	
	R2c (14-30") Brown, fine SAND, some fine gravel (moist) [FILL]	7					180.4	Sampled RB12_9-10 at 12:05
		8					2.0	
		9					0.6	Sampled RB12_10-12 at 12:10
		10						
		11						
	R3 (0-30") Brown, fine SAND, trace silt, brick, metal (wet) [FILL]	12	3	MACROCORE	30/60	NA	0.6	
		13					0.6	
		14					0.5	
		15						

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001			
Location		Bronx, NY		Elevation and Datum		NA			
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)		
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)	
	R4a (0-4") Gray, fine SAND, trace silt (moist)	15	4	MACROCORE	54/60	NA	End of boring at 20' bgs. Backfilled with cuttings/clean sand to surface grade.		
		R4b (4-14") Gray, silty CLAY (moist)						16	0.5
								R4c (14-36") Gray, silty fine SAND (moist)	17
								R4d (36-54") Gray, silty CLAY, (moist)	18
			19	0.5					
		20							
		21							
		22							
		23							
		24							
		25							
		26							
		27							
		28							
		29							
		30							
		31							
		32							
		33							

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/7/19		Date Finished 1/7/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 35 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 7	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 24		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BU/in			
	12-inch concrete slab	0							
	R1 (0-28") Brown to tan fine SAND, brick, timber, fine gravel (moist) [FILL]	1	1	MACROCORE	28/60	NA	0.1 0.1 0.8 0.3 0.4	Sampled RB13_0-2 at 10:45	
	R2 (0-28") Brown fine SAND, brick (moist) [FILL]	2	2	MACROCORE	28/60	NA	0.3 0.5 1.9 20.2		
	R3a (0-26") Brown fine SAND, trace fine gravel (moist)	3	3	MACROCORE	32/60	NA	1.4 1.2 1.7		
	R3b (26-32") Black fine SAND, trace medium sand. fine gravel (moist)	14					26.2 117		Petroleum like odors

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 No Recovery	15 16 17 18 19	4	MACROCORE	0/60	NA	
	R5 (0-12") Brown to gray fine SAND, trace medium sand (moist-wet)	20 21 22 23 24 25	5	MACROCORE	12/60	NA	67.5 385.1 Petroleum like odors
	R6 (0-40") Brown fine SAND (wet)	26 27 28 29	6	MACROCORE	40/60	NA	38.7 17.1 8.9 12.0 14.1 20.3 17.7 Petroleum like odors
	R7 (0-60") Brown fine SAND (wet)	30 31 32 33	7	MACROCORE	60/60	NA	6.2 3.3 1.7 2.0 2.3 Sampled RB13_33-35 at 10:55

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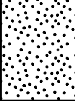
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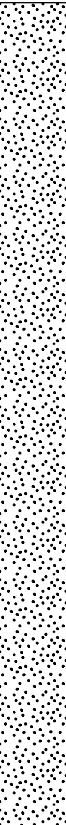
Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
		34	7		60/60		1.4
		35					0.7
		35					1.0
		36					
		37					
		38					
		39					
		40					
		41					
		42					
		43					
		44					
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		48					
		49					
		50					
		51					
		52					
		52.5					

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/7/19		Date Finished 1/7/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 5	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 19		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	12-inch concrete slab	0						
	R1 (0-14") Brown fine SAND, brick, concrete (dry) [FILL]	1				8.8		
		2	1	MACROCORE	14/60	NA	0.1	
		3					0.0	
		4						
		5						
	R2 (0-14") Brown fine SAND (moist) [FILL]	6						
		7	2	MACROCORE	14/60	NA		
		8						
		9					0.0	
		10					0.0	
	R3 (0-24") Brown fine SAND, trace medium sand, trace fine gravel (moist)	11						
		12	3	MACROCORE	24/60	NA		
		13					0.5	
		14					0.4	
		15					0.3	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
	R4a (0-18") Brown fine SAND, trace medium sand, trace fine gravel (moist)	15	4	MACROCORE	36/60	NA	1.1 2.4 17.1 48.3 148 831	
	R4b (18-36") Brown to gray fine SAND, peat (moist-wet)	16						
		17						
		18						
		19		5	MACROCORE	32/60	NA	75.7 973 1006 838 73.7 35.1
	R5 (0-32") Gray to brown fine SAND (moist)	20						
		21						
		22						
		23						
		24						
	25							
		26						
		27						
		28						
		29						
		30						
		31						
		32						
		33						

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/7/19		Date Finished 1/7/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 35 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 7	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 17.5		Completion NA	24 HR. 19
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	12-inch concrete slab	0						
	R1 (0-28") Brown fine SAND, fine gravel (dry) [FILL]	1	1	MACROCORE	28/60	NA	0.0	Sampled RB14_0-2 at 12:20
		2					0.0	
		3					0.0	
		4					0.0	
		5					0.0	
		6					0.0	
		7	2	MACROCORE	28/60	NA	0.3	
	R2 (0-28") Brown fine SAND, fine gravel (dry) [FILL]	8					0.2	
		9					0.4	
		10					0.3	
		11					0.4	
		12					0.4	
		13	3	MACROCORE	22/60	NA	9.9	
	R3a (0-14") Brown to gray fine SAND, trace medium sand, slag, ash, fine gravel (moist) [FILL]	14					13.2	
		15					8.8	
	R3b (14-22") Brown fine SAND (moist)	16					10.0	
		17					24	

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
		34	7		52/60		1.9
		35					0.9
		35					0.9
		36					
		37					
		38					
		39					
		40					
		41					
		42					
		43					
		44					
		45					
		46					
		47					
		48					
		49					
		50					
		51					
		52					
		52.5					

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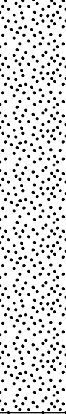
Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4a (0-24") Brown fine SAND, brick, fine gravel (moist) [FILL]	15	4	MACROCORE	30/60	NA	
		16					
		17					1.7
		18					1.3
	R4b (24-30") Black to gray fine SAND, fine gravel (moist) [FILL]	19					
		20					6.0
		21					11.2
		22					
	R5a (0-12") Black to gray fine SAND, fine gravel (wet) [FILL]	23	5	MACROCORE	24/60	NA	375
		24					1101
		25					563
		26					102
R5b (12-24") Gray to brown fine SAND (wet)	27					18.8	
	28					19.1	
	29						
	30						
R6 (0-34") Brown fine SAND (wet)	31	6	MACROCORE	34/60	NA	9.9	
	32					6.1	
	33					5.4	
	34					3.4	
		35				3.3	
		36				5.6	

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/8/19		Date Finished 1/8/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 5	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 17		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Julio Galarza	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	12-inch concrete slab	0						
	R1 (0-29") Brown fine SAND, concrete, fine gravel, wood ash (moist) [FILL]	1	1	MACROCORE	29/60	NA	0.3 1.1	Background PID 0.4
	R2 (0-28") Brown to tan fine SAND (moist) [FILL]	2	2	MACROCORE	28/60	NA	0.5 0.4	Sampled RB16_0-2 at 10:40
		3	3	MACROCORE	30/60	NA	0.5	
	R3a (0-8") Brown to tan fine SAND (moist) [FILL]	4						
		5						
		6						
		7						
	R3b (8-30") Black to dark brown fine SAND, trace medium sand, fine gravel, coal ash, ceramic tile (moist) [FILL]	8					0.3 0.3	
		9					0.3 0.3	
		10					0.4	
		11						
		12						Sampled RB16_13-15 at 10:45
		13					0.3 0.3	
		14					0.8	
		15					0.4 0.3	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-32") Brown to black to reddish brown fine SAND, trace medium sand, fine gravel, coal ash, slag, ceramic tile (moist-wet) [FILL]	15	4	MACROCORE	32/60	NA	
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
	R5 (0-18") Brown to gray fine SAND, trace fine gravel (wet)	25	5	MACROCORE	18/60	NA	0.4 0.3 0.4 0.4 0.3 0.4 0.4 0.4 0.3
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/4/19		Date Finished 1/4/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 5	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 22		Completion NA	24 HR. 20.1
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	2-inch concrete slab	0						
	R1 (0-40") Brown to gray fine SAND, trace medium sand, trace silt, slag, concrete, brick (dry) [FILL]	1	1	MACROCORE	40/60	NA	0.0	Sampled RB17_0-2 at 13:30
		2					0.0	
		3					0.0	
		4					0.0	
		5					0.0	
	R2 (0-36") Gray to black fine SAND, trace medium sand, slag, concrete, glass (dry) [FILL]	6	2	MACROCORE	36/60	NA	0.0	Sampled RB17_4-6 at 13:40
		7					0.0	
		8					0.0	
		9					0.0	
		10					0.0	
	R3 (0-36") Brown fine SAND (moist)	11	3	MACROCORE	36/60	NA	0.0	Sampled RB17_8-10 at 13:35
		12					0.0	
		13					0.0	
		14					0.0	
		15					0.0	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4a (0-14") Brown fine SAND, trace fine gravel (moist)	15	4	MACROCORE	38/60	NA	0.0
		16					
	R4b (14-38") Gray silty CLAY (moist)	17	5	MACROCORE	38/60	NA	0.0
		18					
	R5a (0-8") Brown to gray fine SAND, trace medium sand, some fine gravel (wet)	19	5	MACROCORE	38/60	NA	0.0
		20					
	R5b (8-30") Gray silty CLAY (wet)	21	5	MACROCORE	38/60	NA	0.0
		22					
	R5c (30-38") Gray fine SAND (moist)	23	5	MACROCORE	38/60	NA	0.0
		24					
		25					0.0
		26					0.0
		27					0.0
		28					0.0
		29					0.0
		30					0.0
		31					0.0
		32					0.0
		33					0.0

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Sampled RB17_18-20 at 13:45

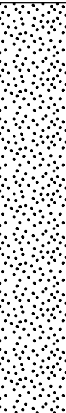
End of boring at 25' bgs.
MW17 installed at 28', 20-slot screen 18' to 28'

Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/4/19		Date Finished 1/4/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 19		Completion NA	24 HR. 19.8
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

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MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in			
	8-inch concrete slab	0							
	R1 (0-26") Brown fine SAND, trace silt, fine gravel, brick, plastic, slag (dry) [FILL]	1	1	MACROCORE	26/60	NA	0.1	Solvent like odor	
		2					9.3		
		3					12.7		
		4					8.9		
		5					3.5		
	R2a (0-16") Brown to tan, fine SAND, brick, slag, concrete (dry-moist) [FILL]	6	2	MACROCORE	48/60	NA	3.6	Solvent like odor	
		7					15.9		
		8					21.6		
	R2b (16-48") Brown fine SAND, trace fine gravel (moist)	9	3	MACROCORE	36/60	NA	4.4	Sampled RB18_6-8 at 9:05	
		10					2.2		
		11					0.6		
		12					0.8		
		13					1.4		
		14							
		15							
	R3 (0-36") Brown to gray fine SAND, trace fine gravel (moist)	12	3	MACROCORE	36/60	NA	2.5		
		13					1.9		
		14					0.9		
		15					1.5		
		16					1.2		

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-36") Brown to gray fine SAND, trace fine gravel (moist)	15	4	MACROCORE	36/60	NA	0.0
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
25							
26							
27							
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/19		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 5	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 19.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA	Drop (in) NA	Drilling Foreman Ron Dixon			
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA	Drop (in) NA				

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MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BLU/in	PID Reading (ppm)	
	8-inch concrete slab	0						
	R1 (0-26") Brown fine SAND, trace silt, concrete, coal (moist) [FILL]	1	1	MACROCORE	26/60	NA		Sampled RB19_0-2 at 14:00
		2					0.0	
		3					0.0	
	R2 (0-40") Tan to brown fine SAND, trace fine gravel (moist)	5	2	MACROCORE	40/60	NA		
		6					0.0	
		7					0.0	
		8					0.0	
		9					0.0	
		10					0.0	
	R3 (0-30") Brown to gray fine SAND, trace fine gravel (moist)	10	3	MACROCORE	30/60			
		11					0.0	
		12					0.0	
		13					0.0	
		14					0.0	
		15					0.0	

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-36") Brown to gray fine SAND, some fine gravel (moist-wet)	15	4	MACROCORE	36/60	NA	
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
	R5a (0-38") Gray to black clayey SILT (wet)	25	5	MACROCORE	40/60	NA	0.0 0.0 0.0 0.0 0.0 0.0 0.0 8.8 47.3 25.6 1.7 0.8 1.2 0.7 0.2
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					
		34					
	R5b (38-40") Gray fine SAND (wet)	25					8.8 14:05 14:10 End of boring at 25' bgs. Backfilled with cuttings/clean sand to surface grade.
		26					

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/4/19		Date Finished 1/4/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 18		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	2-inch concrete slab	0						
	R1 (0-24") Brown to gray medium SAND, fine gravel, coal (dry) [FILL]	1	1	MACROCORE	24/60	NA	0.0	Sampled RB20_0-2 at 9:45
		2					0.0	
		3					0.0	
		4					0.0	
	R2 (0-32") Dark brown to red fine SAND, concrete, coal (dry) [FILL]	5	2	MACROCORE	32/60	NA	0.0	Sampled RB20_7-9 at 9:50
		6					0.0	
		7					0.0	
		8					0.0	
		9					0.0	
	R3a (0-34") Dark brown to red fine SAND, concrete (moist) [FILL]	10	3	MACROCORE	36/60	NA	3.0	Sampled RB20_13-15 at 9:55
		11					0.0	
		12					0.0	
		13					2.2	
		14					0.0	
		15					0.0	

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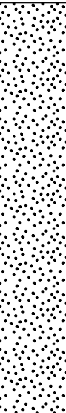
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Sheet

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R3b (34-36") Brown fine SAND, trace fine gravel (moist)	15	4	MACROCORE	40/60	NA	0.0
	R4 (0-40") Brown fine SAND, trace fine gravel (moist-wet)	16					
		17					
		18					0.0
		19					0.0
		20					0.0
		21					0.0
		22					0.0
		23					0.0
		24					0.0
		25					0.0
		26					0.0
		27					0.0
		28					0.0
		29					0.0
		30					0.0
		31					0.0
		32					0.0
		33					0.0

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Sampled RB20_18-20 at 10:00

End of boring at 20' bgs. Backfilled with cuttings/clean sand to surface grade.

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/19		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 20 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	8-inch concrete slab	0						
	R1a (0-30") Brown to tan to gray fine SAND, brick, fine gravel, coal ash (dry) [FILL]	1	1	MACROCORE	36/60	NA	0.0	Step-out ~5' west of RB21
	R1b (30-36") Brown fine SAND, trace fine gravel (moist)	3					0.0	Sampled RB21_0-2 at 11:30
		4					0.3	
		5					0.0	Sampled RB21_2-4 at 11:35
		6						
	R2 (0-32") Brown to gray fine SAND, trace fine gravel (moist)	7	2	MACROCORE	32/60	NA	0.0	
		8					0.0	
		9					0.0	
		10					0.0	
		11					0.0	
	R3 (0-42") Brown to gray fine SAND, trace fine gravel (moist)	12	3	MACROCORE	42/60	NA	0.0	
		13					0.0	
		14					0.0	
		15					0.0	

Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001						
Location Bronx, NY		Elevation and Datum NA						
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
R4	R4 (0-30") Brown to gray fine SAND, some fine gravel (moist)	15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33	4	MACROCORE	30/60	NA	0.0 0.0 0.0 0.0 0.0 0.0	Sampled RB21_18-20 at 11:40 End of boring at 20' bgs. Backfilled with cuttings/clean sand to surface grade.

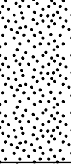
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/19		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 17 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 4	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BLU/in	PID Reading (ppm)	
	8-inch concrete slab	0						
	R1 (0-34") Brown to black to tan fine SAND, fine gravel, brick, coal, slag (dry) [FILL]	1	1	MACROCORE	34/60	NA	0.0	
		2					0.0	
		3					0.0	
	R2 (0-22") Brown fine SAND, trace silt, trace fine gravel (dry)	4					0.0	
		5					0.0	
		6					0.0	
	R3 (0-50") Brown to gray fine SAND. trace fine sand, trace fine gravel (dry)	7	2	MACROCORE	22/60	NA	0.0	
		8					0.0	
		9					0.0	
		10					0.0	
		11					0.0	
		12					0.0	
		13	3	MACROCORE	50/60	NA	0.0	
		14					0.0	
		15					0.0	

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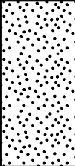
Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-20") Brown medium SAND, trace silt, some fine gravel (moist)	15	4	MACROCORE	20/24	NA	0.0
		16					0.0
		17					0.0
		18					0.0
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					
							End of Boring at 17' (refusal) Backfilled with cuttings/clean sand to surface grade. Step out boring RB21a advanced ~5' west

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/19		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 3	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First NA		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	8-inch concrete slab	0						
	R1 (0-26") Brown to tan to gray fine SAND, trace medium sand, wood ash (dry) [FILL]	1					0.0	Sampled RB22_0-2 at 13:00
		2					0.0	
		3	1	MACROCORE	26/60	NA	0.3	
	R2 (0-44") Brown to gray to tan medium sand, trace fine gravel (moist)	4					0.0	Sampled RB22_3-5 at 13:05
		5					0.0	
		6	2	MACROCORE	44/60	NA	0.0	
		7					0.0	
		8					0.0	
		9					0.0	
	R3 (0-18") Brown fine SAND, some fine gravel (moist)	10					0.0	
		11					0.0	
		12	3	MACROCORE	18/60	NA	0.0	
		13					0.0	
		14					0.0	
		15					0.0	

Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R4 (0-12") Brown to gray fine SAND, some fine gravel (moist)	15	4	MACROCORE	12/60	NA	0.0
		16					
		17					0.0
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

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End of Boring at 17' (refusal)
Backfilled with cuttings/clean sand to surface grade.
Step out boring RB22a advanced ~5' west

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 1/3/10		Date Finished 1/3/19	
Drilling Equipment Geoprobe 7822 DT				Completion Depth 25 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 2		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 21		Completion NA	24 HR. 20.1
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Ron Dixon	
Sampler 5-foot stainless steel macrocore sampler				Field Engineer Tyler Goodnough			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in	PID Reading (ppm)	
	Did not collect soil from 0-15', see RB22 soil boring log for soil classification	0						Step-out ~5' west of RB22
		1						
		2						
		3						
		4						
		5						
		6						
		7						
		8						
		9						
		10						
		11						
		12						
		13						
		14						
		15						

Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001	
Location		Bronx, NY		Elevation and Datum		NA	
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
	R1 (0-12") gray to brown fine SAND, some fine gravel (moist)	15	1	MACROCORE	12/60	NA	
		16					
		17					
		18					
		19					0.0
		20					0.0
		21					0.0
	R2 (0-40") Brown to black fine SAND, some fine gravel (wet)	21	2	MACROCORE	48/60	NA	
		22					
		23					
		24					0.0
		25					0.0
		26					0.0
		27					0.0
		28					0.0
		29					0.0
		30					0.0
		31					0.0
		32					0.0
		33					0.0
	R3b (40-48") Gray to black silty CLAY, trace fine sand (wet)	24					
		25					
		26					
		27					
		28					
		29					
		30					
		31					
		32					
		33					

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Sampled RB22_20-22 at 11:30

End of boring at 25' bgs. RMW22 installed at 27', 20-slot screen 17' to 27'

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/10/19		Date Finished 7/10/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 3	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 15		Completion NA	Core 24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	3-inch concrete slab	0						
	R1 (0-18") brown to black medium SAND, trace fine gravel, glass, brick (dry) [FILL]	1					0.0	Sampled RB23_0-2 at 13:55
		2	R1	MACROCORE	18/48	NA	0.0	
		3					0.0	
	R2 (0-14") reddish-brown fine gravelly fine SAND (dry)	4						
		5						
		6	R2	MACROCORE	14/48	NA		
	R3 (0-30") reddish-brown fine gravelly fine SAND (dry)	7					0.0	
		8					0.0	
		9					0.0	
	R4a (0-30") gray fine gravelly, fine SAND (dry)	10					0.0	Sampled RB23_10-12 at 14:0
		11	R3	MACROCORE	30/48	NA	0.0	
		12					0.0	
	R4b (30-38") reddish-brown fine SAND, trace fine gravel (wet)	13					0.0	Sampled RB23_13-15 at 14:10
		14	R4	MACROCORE	38/48	NA	0.0	
		15					0.0	

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Log of Boring


RB23/RMW23

Sheet

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001						
Location Bronx, NY		Elevation and Datum NA						
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
		15					0.0	End of boring at 16' bgs. MW23 installed at 19', 20-slot screen 9' to 19'
		16	R4		38/48		0.0	
		17					0.0	
		18						
		19						
		20						
		21						
		22						
		23						
		24						
		25						
		26						
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/10/19		Date Finished 7/10/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 3		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 15.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BU/in		PID Reading (ppm)
	3-inch concrete slab	0						
	R1 (0-24") brown to black medium SAND, trace fine gravel, ash, glass, concrete (dry)	1	R1	MACROCORE	24/48	NA	0.0	Sampled RB24_0-2 at 11:45
		2					0.0	
		3					0.0	
		4					0.0	
	R2 (0-34") reddish-brown fine SAND, trace silt, trace fine gravel (dry)	5	R2	MACROCORE	34/48	NA	0.0	slight chemical-like odor
		6					0.0	
		7					0.0	
		8					0.0	
	R3 (0-12") reddish brown fine SAND, trace silt, trace medium gravel (dry)	9	R3	MACROCORE	12/48	NA	0.0	Sampled RB24_8-10 at 11:55 refusal on rock (boulder) offset boring 3 ft. south
		10					0.0	
		11					0.0	
		12					0.0	
	R4 (0-44") soft grey CLAY (moist)	13	R4	MACROCORE	44/48	NA	0.0	Sampled RB24_13-15 at 12:15
		14					0.0	
		15					0.0	

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Log of Boring


RB24

Sheet

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001				
Location Bronx, NY		Elevation and Datum NA				
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data			Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	PID Reading (ppm)	
		15	R4	44/48	0.0	End of boring at 16' bgs. Backfilled with cuttings/clean sand to surface grade and patched borehole with concrete.
		16			0.0	
		17				
		18				
		19				
		20				
		21				
		22				
		23				
		24				
		25				
		26				
		27				
		28				
		29				
	30					
	31					
	32					
	33					

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/11/19		Date Finished 7/11/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 3		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 12.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	3-inch concrete slab	0						
	R1 (0-24") dark brown to black medium SAND, trace medium gravel, glass, brick (dry) [FILL]	1	R1	MACROCORE	24/48	NA	0.0	Sampled RB25_0-2 at 11:10
		2					0.0	
		3					0.0	
		4					0.0	
	R2 (0-32") reddish-brown fine SAND, trace fine gravel (dry)	5	R2	MACROCORE	32/48	NA	0.0	Sampled RB25_9-11 at 11:20
		6					0.0	
		7					0.0	
		8					0.0	
	R3 (0-32") reddish-brown fine SAND, some silt (moist)	9	R3	MACROCORE	32/48	NA	0.0	Sampled RB25_11-13 at 11:30
		10					0.0	
		11					0.0	
		12					0.0	
	R4 (0-48") brown to reddish-brown silty fine SAND (wet)	13	R4	MACROCORE	48/48	NA	0.0	
		14					0.0	
		15					0.0	

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Log of Boring


RB25/RMW25

Sheet

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
		15	R4		48/48		0.0 0.0 0.0	chemical-like odor
		16						End of boring at 16' bgs. RMW25 installed at 20', 20-slot screen 10' to 20'
		17						
		18						
		19						
		20						
		21						
		22						
		23						
		24						
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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/10/19		Date Finished 7/10/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples		Disturbed 3	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 15		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

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MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	3-inch concrete slab	0						
	R1 (0-20") dark brown to black medium SAND, trace medium gravel, ash, coal, brick (dry) [FILL]	1					0.0	Sampled RB26_0-2 at 12:45
		2	R1	MACROCORE	26/48	NA	0.0	
		3					0.0	
		4					0.0	
	R2a (0-10") black medium SAND, trace fine gravel, ash, coal, brick (dry) [FILL]	5					0.0	
	R2b (10-30") reddish-brown fine SAND, trace fine gravel (dry)	6	R2	MACROCORE	30/48	NA	0.0	
		7					0.0	
		8					0.0	
	R3 (0-30") reddish-brown fine gravelly, fine SAND (dry)	9					0.0	
		10	R3	MACROCORE	30/48	NA	0.0	
		11					0.0	
		12					0.0	
	R4 (0-48") soft grey CLAY	13					0.0	Sampled RB26_10-12 at 13:00
		14	R4	MACROCORE	48/48	NA	0.0	
		15					0.0	

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Log of Boring


RB26

Sheet

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/ft		PID Reading (ppm)
		15	R4		48/48		0.0	Sampled RB26_14-16 at 13:05
		16					0.0	End of boring at 16' bgs. Backfilled with cuttings/clean sand to surface grade and patched borehole with concrete.
		17					0.0	
		18						
		19						
		20						
		21						
		22						
		23						
		24						
		25						
		26						
		27						
	28							
	29							
	30							
	31							
	32							
	33							

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/11/19		Date Finished 7/11/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 3		Disturbed NA	
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 12		Undisturbed NA	
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Core NA	
Sampler 4-foot stainless steel macrocore sampler				Drilling Foreman Adam Hutchinson			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA		Field Engineer Patrick Stovall	

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	3-inch concrete slab	0						
	R1 (0-12") brown to black medium SAND, trace fine gravel, slag, coal, brick, glass (dry) [FILL]	1	R1	MACROCORE	12/48	NA	0.0	collected RB27_0-2 at 12:35
		2					0.0	
	R2 (0-20") reddish-brown to black fine SAND, trace fine gravel, trace silt (dry) [FILL]	4	R2	MACROCORE	20/48	NA	0.0	
		5					0.0	
		6					0.0	
	R3 (0-32") reddish-brown silty SAND (moist)	8	R3	MACROCORE	32/48	NA	0.0	collected RB27_9-11 at 12:45
		9					0.0	
		10					0.0	
	R4 (0-48") reddish-brown silty SAND (wet)	12	R4	MACROCORE	48/48	NA	0.0	collected RB27_11-13 at 12:50
		13					0.0	
		14					0.0	
		15					0.0	

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Log of Boring


RB27

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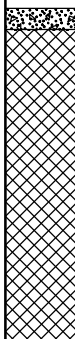
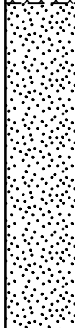
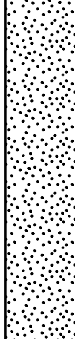
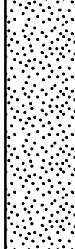
Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No. 170487001					
Location Bronx, NY		Elevation and Datum NA					
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BL/6in	
		15	R4	█	48/48		0.0
		16					0.0
		16					0.0
			17				
			18				
			19				
			20				
			21				
			22				
			23				
			24				
			25				
			26				
		27					
		28					
		29					
		30					
		31					
		32					
		33					

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End of boring at 16' bgs.
Backfilled with cuttings/clean sand to surface grade and patched borehole with concrete.

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Project Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)				Project No. 170487001			
Location Bronx, NY				Elevation and Datum NA			
Drilling Company AARCO Environmental				Date Started 7/11/19		Date Finished 7/11/19	
Drilling Equipment Geoprobe 7730 DT				Completion Depth 16 ft		Rock Depth NA	
Size and Type of Bit 2-inch direct push macrocore cutting shoe				Number of Samples 3		Disturbed NA	Undisturbed NA
Casing Diameter (in) NA		Casing Depth (ft) NA		Water Level (ft.) First 14.5		Completion NA	24 HR. NA
Casing Hammer NA		Weight (lbs) NA		Drop (in) NA		Drilling Foreman Adam Hutchinson	
Sampler 4-foot stainless steel macrocore sampler				Field Engineer Patrick Stovall			
Sampler Hammer NA		Weight (lbs) NA		Drop (in) NA			

MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				PID Reading (ppm)	Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
			Number	Type	Recov. (in)	Penetr. resist. BU/in		
	3-inch concrete	0						
	R1 (0-22") brown to black medium SAND, trace medium gravel, coal, brick, wood, concrete (dry) [FILL]	1					0.0	collected RB28_0-2 at 13:55
		2	R1	MACROCORE	22/48	NA	16.3	
		3					0.0	
	R2 (0-30") reddish-brown silty SAND (dry)	4						
	R2 (0-30") reddish-brown silty SAND (dry)	5					0.0	collected RB28_6-8 at 14:00 collected SODUP06_071119
		6	R2	MACROCORE	30/48	NA	3.2	
		7					0.0	
8					0.0			
	R3 (0-24") brown to grey fine SAND, some medium gravel (dry) (decomposed rock)	8						
	R3 (0-24") brown to grey fine SAND, some medium gravel (dry) (decomposed rock)	9					0.0	
		10	R3	MACROCORE	24/48	NA	0.0	
		11					0.0	
	R4 (0-24") grey to black gravelly fine SAND (wet)	12						
	R4 (0-24") grey to black gravelly fine SAND (wet)	13					0.0	
		14	R4	MACROCORE	24/48	NA	0.0	
		15					1.2	

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Log of Boring


RB28

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Project		Gerard Ave & 146th Street (Block 2351, Lots 1, 3, 12 and 20)		Project No.		170487001		
Location		Bronx, NY		Elevation and Datum		NA		
MATERIAL SYMBOL	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
			Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
		15	R4		24/48		1.3	collected RB28_14-16 at 14:15
		16					0.0	End of boring at 16' bgs. Backfilled with cuttings/clean sand to surface grade and patched borehole with concrete.
		17					0.0	
		18						
		19						
		20						
		21						
		22						
		23						
		24						
		25						
		26						
		27						
	28							
	29							
	30							
	31							
	32							
	33							

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APPENDIX C

MONITORING WELL CONSTRUCTION LOGS

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW01

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 13.86 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		12/27/2018	12/27/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 20 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 5 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	13.66	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	12.66	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	10.66	3	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	8.7	5.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-6.34	20	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.52	1/17/2019	11.14 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.82	7/26/2019	10.84 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well's vertical profile. At the top (0 ft depth), there is a casing. Below it is a riser pipe. A seal is located at a depth of 1 foot. Below the seal is a filter section. At a depth of 3 feet, the top of the screen is located. The screen extends to a depth of 5.0 feet. Below the screen, the annulus is filled with No. 2 Sand. The bottom of the boring is at a depth of 20 feet. Labels include 'Riser', 'Seal', 'PVC Screen', and 'No. 2 Sand'.</p>			
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

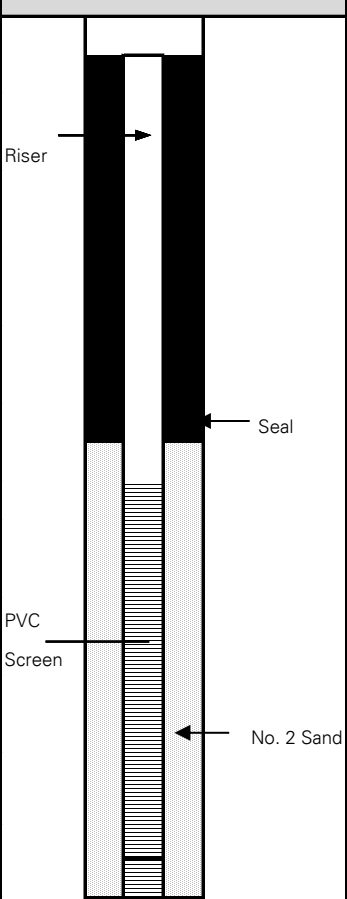
RMW03

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 14.2 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		12/26/2018	12/26/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 25 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 10 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	13.48	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	12.48	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	5.48	8	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	3.5	10.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-11.52	25	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.14	1/17/2019	11.34 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.54	7/26/2019	10.94 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well's vertical structure. From top to bottom: a solid PVC riser (indicated by a solid black bar) extending from the surface down to a depth of 1 foot, where a bentonite seal is located. Below the seal is a 15-foot long PVC screen (indicated by a hatched bar) starting at a depth of 1 foot and ending at 16 feet. The annulus between the casing and the screen is filled with No. 2 Sand (indicated by a stippled bar). The casing extends to a total depth of 25 feet. Labels include 'Riser', 'Seal', 'PVC Screen', and 'No. 2 Sand'.</p>			
<p>LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York</p>			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW04

PROJECT			PROJECT NO.		
Gerard Ave + East 146th Street			170487001		
LOCATION			ELEVATION AND DATUM		
Bronx, NY			el. 13.97 feet NAVD88		
DRILLING AGENCY			DATE STARTED		DATE FINISHED
AARCO Environmental Services, Corp.			12/21/2018		12/21/2018
DRILLING EQUIPMENT			DRILLER		
Geoprobe® 7822 DT			Ron Dixon		
SIZE AND TYPE OF BIT			INSPECTOR		
2-inch Direct Push			Tyler Goodnough		
BOREHOLE DIAMETER			TYPE OF WELL (OVERBURDEN / BEDROCK)		
3.25"			Overburden		
RISER MATERIAL		DIAMETER	TYPE OF BACKFILL MATERIAL		
PVC		2"	No. 2 Sand		
TYPE OF SCREEN		DIAMETER	TYPE OF WELL PACK		TYPE OF SEAL MATERIAL
PVC No. 20 Slot		2"	No. 2 Sand		Bentonite
METHOD OF INSTALLATION					
Advance 3.75-inch casing to 24 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 9 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface					
WELL DEVELOPMENT DATA					
SURGE BLOCK DIAMETER		N/A	TYPE PUMP		Submersible
DRILLER OR LANGAN		Driller	MAX PUMP RATE		N/A
NUMBER OF SURGE CYCLES		N/A	TOTAL VOLUME		N/A
Well pumped until purge water no longer appeared turbid					
TOP OF CASING		ELEVATION	DEPTH (ft)	WELL DETAILS	
		13.74	0		
TOP OF SEAL		ELEVATION	DEPTH (ft)	 <p style="text-align: center;">See boring log</p>	
		12.74	1		
TOP OF FILTER		ELEVATION	DEPTH (ft)		
		6.74	7		
TOP OF SCREEN		ELEVATION	DEPTH (ft)		
		4.7	9.0		
BOTTOM OF BORING		ELEVATION	DEPTH (ft)		
		-10.26	24		
SCREEN LENGTH			15'		
SLOT SIZE			No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS					
ELEVATION		DATE	DEPTH TO WATER		
2		1/17/2019	11.74 ft		
ELEVATION		DATE	DEPTH TO WATER		
2.33		7/26/2019	11.41 ft		
ELEVATION		DATE	DEPTH TO WATER		
ELEVATION		DATE	DEPTH TO WATER		
ELEVATION		DATE	DEPTH TO WATER		
					24.00
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C.					
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York					

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW05

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 14.26 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		12/21/2018	12/21/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 23 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 8 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	14.04	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	13.04	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	8.04	6	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	6.0	8.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-8.96	23	
SCREEN LENGTH		15'	See boring log
SLOT SIZE		No. 20 Slot; 0.020 Inches	
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	<p>The diagram illustrates the well's vertical structure. From top to bottom: a solid PVC riser (0 to 1 ft depth), a bentonite seal (1 ft depth), a PVC casing (1 to 23 ft depth), a screen (8 to 23 ft depth), and a sand pack (2 to 23 ft depth). Labels include 'Riser', 'Seal', 'PVC Screen', and 'No. 2 Sand'.</p>
1.83	1/17/2019	12.21 ft	
2.44	7/26/2019	11.6 ft	
			23.00
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C.			
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW07

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 14.53 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		12/20/2018	12/20/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Nick Turro	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 24 feet bgs, insert 20 feet of 0.02-inch slotted PVC screen and 4 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	14.34	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	13.34	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	12.34	2	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	10.3	4.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-9.66	24	
SCREEN LENGTH		20'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
1.93	1/17/2019	12.41 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.26	7/26/2019	12.08 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well construction. It shows a vertical shaft with a casing extending to a depth of 24 feet. A riser pipe is inserted into the casing, extending to a depth of 1 foot. A seal is located at the top of the riser. A screen is installed in the casing, extending from a depth of 2 feet to 4 feet. The annulus between the casing and the screen is filled with No. 2 Sand. The bottom of the casing is at a depth of 24 feet.</p>			
<p>LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York</p>			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW09

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 21.93 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/2/2019	1/2/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 28 feet bgs, insert 15 feet of 0.02-inch slotted PVC screen and 13 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.67	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.67	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	10.67	11	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	8.7	13.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-6.33	28	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.23	1/17/2019	19.44 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well construction from the surface down to 28 feet. It shows a casing extending to 28 feet, a riser pipe extending to 11 feet, a seal at 1 foot depth, a screen from 11 feet to 13 feet depth, and No. 2 Sand backfill from 13 feet to 28 feet depth. Labels include 'Riser', 'Seal', 'PVC Screen', and 'No. 2 Sand'.</p>			
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW10

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 21.89 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/8/2019	1/8/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 28 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 18 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.5	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.5	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	16
	5.5	16	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	18.00
	3.5	18.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	28.00
	-6.5	28	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.34	1/17/2019	19.16 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.88	7/26/2019	18.62 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

The diagram illustrates the well's vertical profile. At the top (0 ft depth), there is a riser pipe. Below the riser, at a depth of 1 ft, is a seal. The main casing is made of PVC. At 16 ft depth, there is a screen section. Below the screen, the annulus is filled with No. 2 Sand. The total depth of the well is 28 ft. The diagram also shows the groundwater table at approximately 19.16 ft depth on 1/17/2019 and 18.62 ft depth on 7/26/2019.

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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW11

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 22.01 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/2/2019	1/2/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.61	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.61	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	10.61	11	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	8.6	13.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-6.39	28	
SCREEN LENGTH		15'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.35	1/17/2019	19.26 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.93	7/26/2019	18.68 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well's vertical structure. From top to bottom: a solid PVC riser (indicated by a solid black bar) extends from the surface down to a bentonite seal (indicated by a solid black bar). Below the seal is a 15-foot long PVC screen (indicated by a hatched bar) with No. 20 slots. The annulus between the casing and the screen is filled with No. 2 sand (indicated by a dotted pattern). The casing extends to a depth of 27 feet below ground surface (bgs), while the screen extends to 13 feet bgs. The bottom of the boring is at 28 feet bgs.</p>			
<p align="center">LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York</p>			

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW14

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 21.93 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/7/2019	1/7/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.36	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.36	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	15
	6.36	15	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	17.00
	4.4	17.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	27.00
	-5.64	27	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.33	1/17/2019	19.03 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.93	7/26/2019	18.43 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

The diagram illustrates the well's vertical structure. At the top is the ground surface (0 ft depth). Below it is a 1-foot thick seal. A riser pipe extends from the seal down to a screen located at 17.0 feet depth. The screen is 10 feet long and has a slot size of 0.020 inches. Below the screen is a 17-foot section of PVC casing filled with No. 2 Sand. The casing ends at 27.0 feet depth. The bottom of the boring is at -5.64 feet elevation.

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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW16

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 21.85 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/8/2019	1/8/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.25	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.25	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	15
	6.25	15	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	17.00
	4.3	17.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	27.00
	-5.75	27	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.36	1/17/2019	18.89 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.96	7/26/2019	18.29 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

The diagram illustrates the well's vertical structure. At the top (0 ft depth), there is a riser pipe. Below the riser, at a depth of 1 ft, is a seal. The main casing is made of PVC. At 15 ft depth, there is a screen section. Below the screen, the annulus is filled with No. 2 Sand. The total depth of the well is 27 ft. The diagram also shows the groundwater level at approximately 18.3 ft depth.

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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW17

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 22.15 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/4/2019	1/4/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 28 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 18 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	21.96	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	20.96	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	16
	5.96	16	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	18.00
	4.0	18.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	28.00
	-6.04	28	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
1.87	1/17/2019	20.09 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.93	7/26/2019	19.03 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

The diagram illustrates the well construction details. It shows a vertical cross-section of the well. At the top, there is a 'Riser' section. Below the riser is a 'Seal' section. Underneath the seal is a 'PVC Screen' section. The bottom of the well is filled with 'No. 2 Sand'. The diagram is aligned with the 'WELL DETAILS' column of the table above, showing the relative positions of the casing, riser, seal, screen, and sand backfill.

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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW18

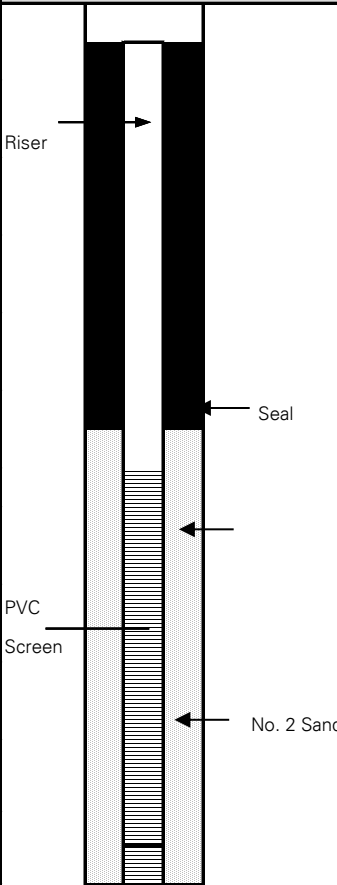
PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 22.25 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/8/2019	1/8/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Julio Galarza	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	22.07	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	21.07	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	See boring log
	7.07	15	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	See boring log
	5.1	17.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	See boring log
	-4.93	27	
SCREEN LENGTH		10'	See boring log
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	See boring log
2.31	1/17/2019	19.76 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
3.12	7/26/2019	18.95 ft	
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
ELEVATION	DATE	DEPTH TO WATER	See boring log
<p>The diagram illustrates the well's vertical structure. At the top is the ground surface. Below it is a solid PVC riser. A bentonite seal is located at a depth of 1 foot. Below the seal is a 10-foot long PVC screen with No. 20 slots. The annulus between the casing and the screen is filled with No. 2 sand. The casing extends to a depth of 27 feet below ground surface.</p>			
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW22

PROJECT		PROJECT NO.	
Gerard Ave + East 146th Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 22.44 feet NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		1/4/2019	1/4/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Ron Dixon	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Tyler Goodnough	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
3.25"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Advance 3.75-inch casing to 27 feet bgs, insert 10 feet of 0.02-inch slotted PVC screen and 17 feet of solid PVC riser, annulus filled with No. 2 filter sand to approximately 2 feet above the top of screen, bentonite seal to grade surface			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Driller	MAX PUMP RATE	N/A
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	N/A
Well pumped until purge water no longer appeared turbid			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS
	22.29	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	See boring log
	21.29	1	
TOP OF FILTER	ELEVATION	DEPTH (ft)	15
	7.29	15	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	17.00
	5.3	17.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	27.00
	-4.71	27	
SCREEN LENGTH		10'	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.21	1/17/2019	20.08 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.53	7/26/2019	19.76 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	



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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW23

PROJECT		PROJECT NO.	
404 Exterior Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 15.79 NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services Corp.		7/10/2019	7/10/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7730 DT		Adam Hutchinson	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Patrick Stovall	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2-inches		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	filpro sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Geoprobe 7730 DT was used to advance the boring to approximately 19 feet bgs. A two-inch (2") PVC monitoring well was installed which consisted of 10' of 20 slot (0.020-inch) well screen, and a solid 2" PVC riser. Well screen was installed from approximately 9 to 19 feet bgs with riser from 9 feet bgs to surface. Wells were finished with a flush mounted road box and concrete pad.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Langan	MAX PUMP RATE	1 LPM
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	15 gal
Well developed from 1:30 - 2:00 PM until purged groundwater was no longer turbid.			
TOP OF CASING	ELEVATION	DEPTH (ft)	
	15.79	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	
	8.79	7	
TOP OF FILTER	ELEVATION	DEPTH (ft)	
	7.79	8	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	
	6.8	9.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	
	-3.21	19	
SCREEN LENGTH		10	
SLOT SIZE	No. 20 Slot; 0.020 Inches		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
2.49	7/12/2019	13.3 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.57	7/26/2019	13.22 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
			19
ELEVATION	DATE	DEPTH TO WATER	
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

RMW25

PROJECT		PROJECT NO.	
404 Exterior Street		170487001	
LOCATION		ELEVATION AND DATUM	
Bronx, NY		el. 15.26 NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services Corp.		7/11/2019	7/11/2019
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7730 DT		Adam Hutchinson	
SIZE AND TYPE OF BIT		INSPECTOR	
2-inch Direct Push		Patrick Stovall	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2"		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2"	filpro sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 20 Slot	2"	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
Geoprobe 7730 DT was used to advance the boring to approximately 20 feet bgs. A two-inch (2") PVC monitoring well was installed which consisted of 10' of 20 slot (0.020-inch) well screen, and a solid 2" PVC riser. Well screen was installed from approximately 10 to 20 feet bgs with riser from 10 feet bgs to surface. Wells were finished with a flush mounted road box and concrete pad.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Submersible
DRILLER OR LANGAN	Langan	MAX PUMP RATE	1 LPM
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	3 gal
Well developed from 2:00 - 2:30 PM until purged groundwater was no longer turbid.			
TOP OF CASING	ELEVATION	DEPTH (ft)	
	15.26	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	
	7.26	8	
TOP OF FILTER	ELEVATION	DEPTH (ft)	
	6.26	9	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	
	5.3	10.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	
	-4.74	20	
SCREEN LENGTH		10	
SLOT SIZE	No. 20 Slot; 0.020 Inches		8
			9
			10
			20
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
3.05	7/12/2019	12.21 ft	
ELEVATION	DATE	DEPTH TO WATER	
2.98	7/26/2019	12.28 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
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APPENDIX D

GROUNDWATER SAMPLING LOGS

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW01	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW01_011619
Project Number:	170487003	Well Depth:	20'	Pine Number:	21202	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.1	Sample Date:	1/16/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	5-20'	Pine Number:	042076	Pump Intake Depth:	16'		
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	11.08	Sample Time:	10:00

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
8:50	14.87	6.17	-9	5.56	650.0	0.00	11.20		1.2	turbid brown, same sulfuric odor as RMW03	N/A
8:55	16.13	5.82	-65	5.34	266.00	0.00	11.27	0.18	2.1		N/A
9:00	16.11	5.76	-71	5.28	200.00	0.00	11.31	0.1	2.6		N
9:05	16.15	5.55	-84	5.12	120.00	0.00	11.37	0.12	3.2		N
9:10	16.12	5.42	-93	4.99	45.90	0.00	11.39	0.11	3.75		N
9:15	16.19	5.37	-100	4.91	20.10	0.00	11.41	0.13	4.4		N
9:20	16.20	5.35	-105	4.85	92.10	0.00	11.45	0.1	4.9		N
9:25	16.21	5.33	-110	4.80	46.5	0.00	11.50	0.1	5.4		N
9:30	16.20	5.33	-114	4.79	23.3	0.00	11.52	0.08	5.8		N
9:35	16.31	5.33	-118	4.75	10.4	0.00	11.55	0.1	6.3		N
9:40	16.26	5.33	-120	4.72	4.4	0.00	11.56	0.08	6.7	N	
9:45	16.21	5.33	-123	4.72	2.4	0.00	11.57	0.08	7.1	N	
9:50	16.22	5.33	-124	4.72	2.0	0.00	11.57	0.1	7.6	Y	

- Notes:**
- Well depths and groundwater depths were measured in feet below the top of well casing.
 - Well and tubing diameters are measured in inches.
 - PID = Photoionization Detector
 - PPM = Parts per million
 - pH = Hydrogen ion concentration
 - ORP = Oxidation-reduction potential, measured in millivolts (mV)
 - DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 - DTW = Depth to water
 - mS/cm = milli-Siemans per centimeter
 - NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information		
Project Name:	Gerard + E. 146th	Well No:	RMW03	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW03_011519	
Project Number:	170487003	Well Depth:	25'	Pine Number:	21202	Background PID (ppm):	0.0			
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.0	Sample Date:	1/15/2019	
Sampling Personnel:	T. Goodnough	Well Screen Interval:	10-25'	Pine Number:	042076	Pump Intake Depth:	18'	Sample Time:	15:30	
				Tubing Diameter:		3/8" x 1/2"		Depth to Water Before Purge:		11.85

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
2:18	15.20	5.99	-10	3.92	1000.0	0.00	12.22		2.25	black turbid, strong petroleum/ sulfuric odor	N/A
2:23	15.95	5.98	-50	3.77	933.00	0.00	12.27	0.07	2.6		N/A
2:28	16.55	5.94	-77	3.60	640.00	0.00	12.36	0.08	3		N
2:33	16.85	5.88	-89	3.49	398.00	0.00	12.43	0.08	3.4		N
2:38	16.86	5.83	-100	3.42	255.00	0.00	12.54	0.08	3.8		N
2:43	16.88	5.81	-105	3.40	160.00	0.00	12.57	0.1	4.3		N
2:48	16.85	5.88	-111	3.41	93.90	0.00	12.60	0.1	4.8		N
2:53	17.10	5.76	-116	3.38	75.2	0.00	12.62	0.06	5.1		N
2:58	17.40	5.73	-119	3.37	40.8	0.00	12.63	0.13	5.75		N
3:03	17.36	5.72	-121	3.36	33.4	0.00	12.65	0.1	6.25		N
3:08	17.31	5.71	-124	3.35	23.4	0.00	12.67	0.1	6.75		N
3:13	17.26	5.70	-126	3.34	21.6	0.00	12.68	6.35	7.25		N
3:18	17.24	5.70	-127	3.33	15.9	0.00	12.71	0.1	7.75	N	

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit
 11. Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW04	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW04_011519
Project Number:	170487003	Well Depth:	24'	Pine Number:	21202	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.0	Sample Date:	1/15/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	9-24'	Pine Number:	042076	Pump Intake Depth:	18'		
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	11.65	Sample Time:	13:00

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
11:43	14.58	5.57	-58	2.89	1000.0	0.00	12.75		2	turbid brown, little odor	N/A
11:48	15.00	5.58	-75	2.79	1000.00	0.00	12.86	0.1	2.5		N/A
11:53	14.96	5.60	-80	2.72	1000.00	0.00	12.97	0.05	2.75		N
11:58	15.12	5.59	-84	2.69	1000.00	0.00	13.05	0.05	3		N
12:03	15.22	5.59	-87	2.66	1000.00	0.00	13.19	0.06	3.3		Y
12:08	16.19	5.55	-87	2.57	1000.00	0.31	13.37	0.12	3.9		N
12:13	15.96	5.53	-85	2.51	932.00	0.19	13.49	0.08	4.3		N
12:18	15.70	5.49	-84	2.48	1000.0	0.00	13.58	0.12	4.9		N
12:23	15.87	5.48	-84	2.44	1000.0	0.00	13.66	0.06	5.2		Y
12:28	15.80	5.47	-84	2.41	669.0	0.00	13.72	0.12	5.8		N
12:33	15.99	5.47	-84	2.39	492.0	0.20	13.80	0.1	6.3		N
12:38	15.94	5.47	-83	2.37	306.0	0.19	13.84	0.06	6.6	N	
12:43	15.91	5.47	-83	2.36	227.0	0.11	13.89	0.06	6.9	N	

Notes:
1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
8. DTW = Depth to water
9. mS/cm = milli-Siemans per centimeter
10. NTU = Nephelometric Turbidity Unit
11. Well stabilized; however, continued purging due to turbid water. Sample collected after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information			
Project Name:	Gerard + E. 146th	Well No:	RMW05	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW05_011519		
Project Number:	170487003	Well Depth:	21'	Pine Number:	21202	Background PID (ppm):	0.1				
Site Location:	Bronx, NY	Well Diameter:	2'	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.5	Sample Date:	1/15/2019		
Sampling Personnel:	T. Goodnough	Well Screen Interval:	8-23'	Pine Number:	042076	Pump Intake Depth:	18'				
						Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	12.07	Sample Time:	1100

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
9:38	11.71	6.39	24	1.52	1000.0	0.00	12.13		0.75	turbid brown, sulfuric organic odor	N/A
9:43	16.70	6.39	-61	1.65	1000.00	0.00	12.15	0.11	1.3		N/A
9:48	15.96	6.30	-79	1.61	1000.00	0.00	12.17	0.1	1.8		N
9:53	15.69	6.26	-86	1.61	1000.00	0.00	12.18	0.04	2		N
9:58	14.84	6.20	-92	1.60	1000.00	0.00	12.19		2.2		N
10:03	16.97	6.09	-98	1.62	1000.00	0.00	12.21	0.24	3.4		N
10:08	16.17	6.03	-100	1.64	1000.00	0.00	12.22	0.04	3.6		N
10:13	16.40	6.00	-103	1.64	1000.0	0.00	12.23	0.04	3.8		N
10:18	16.33	5.98	-111	1.60	1000.0	0.00	12.25	0.08	4.2		N
10:23	17.42	5.86	-119	1.55	1000.0	0.00	12.27	0.16	5		N
10:28	17.08	5.92	-127	1.49	1000.0	0.00	12.30	0.1	5.5		N
10:33	16.85	5.87	-138	1.47	1000.0	0.00	12.31	0.1	6		N
10:38	16.89	5.85	-149	1.47	1000.0	0.00	12.31	0.1	6.5		N
											N

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit
 11. Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW07	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW07_011619
Project Number:	170487003	Well Depth:	24'	Pine Number:	21202	Background PID (ppm):	0.0		Sample Date:
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	QED Sample Pro	PID Beneath Inner Cap (ppm):	0.0	Sample Time:	12:00
Sampling Personnel:	T. Goodnough	Well Screen Interval:	4-24'	Pine Number:	43733	Pump Intake Depth:	19'		
				Tubing Diameter:	1/4" x 3/8"	Depth to Water Before Purge:	N/A		

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?	
					BEGIN PURGING							
10:47	13.90	5.58	-10	1.10	1000.0	0.00	NA		0.7	light brown, no odor	N/A	
10:52	14.59	5.44	-6	1.10	321.00	0.00	NA	0.14	1.4		N/A	
10:57	14.52	5.40	-3	1.07	193.00	0.00	NA	0.07	1.75		N	
11:02	14.62	5.35	1	1.05	85.70	0.00	NA	0.13	2.4		N	
11:07	14.66	5.32	3	1.04	60.90	0.00	NA	0.1	2.9		N	
11:12	14.60	5.30	6	1.03	40.60	0.00	NA	0.14	3.6		N	
11:17	14.61	5.30	9	1.03	33.00	0.00	NA	0.12	4.2		N	
11:22	14.62	5.29	10	1.02	28.8	0.00	NA	0.12	4.8		N	
11:27	14.61	5.28	12	1.02	18.7	0.00	NA	0.12	5.4		N	
11:32	14.59	5.27	14	1.02	17.9	0.00	NA	0.1	5.9		N	
11:37	14.58	5.26	16	1.02	17.0	0.00	NA	0.1	6.4		Y	

Notes:
1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
8. DTW = Depth to water
9. mS/cm = milli-Siemans per centimeter
10. NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information			Sampling Conditions			Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW09	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW09_011619		
Project Number:	170487003	Well Depth:		Pine Number:	21202	Background PID (ppm):	0.1				
Site Location:	Bronx, NY	Well Diameter:		Pump Make and Model:	QED Sample Pro	PID Beneath Inner Cap (ppm):	414.4			Sample Date:	1/16/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:		Pine Number:	43733	Pump Intake Depth:	24'			Sample Time:	15:00
				Tubing Diameter:	1/4" x 3/8"	Depth to Water Before Purge:	N/A				
STABILIZATION = 3 successive readings within limits											
TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
1:42	13.33	5.96	-71	1.65	1000.0	0.92	NA		0.25	turbid brown, petroleum-like odor	N/A
1:47	14.38	5.81	-83	1.59	755.00	1.23	NA	0.05	0.5		N/A
1:52	14.82	5.48	-87	1.55	510.00	1.42	NA	0.05	0.75		N
1:57	14.98	5.33	-88	1.51	403.00	0.56	NA	0.05	1		N
2:02	15.11	5.20	-88	1.48	243.00	0.42	NA	0.05	1.25		N
2:07	15.16	5.14	-88	1.44	149.00	2.82	NA	0.05	1.5		N
2:12	15.18	5.11	-87	1.43	120.00	0.29	NA	0.05	1.75		N
2:17	15.21	5.08	-87	1.42	113.0	0.29	NA	0.05	2		N
2:22	15.22	5.07	-86	1.41	92.6	0.39	NA	0.05	2.25		N
2:27	15.21	5.06	-86	1.41	70.6	0.38	NA	0.07	2.6		N
2:32	15.16	5.06	-85	1.40	72.7	0.72	NA	0.06	2.9		N
2:37	15.20	5.05	-85	1.40	36.6	0.59	NA	0.06	3.2		N
2:42	15.19	5.05	-85	1.40	27.5	0.47	NA	0.06	3.5	N	

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit
 11. Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information			Sampling Conditions			Sampling Information	
Project Name:	Gerard + E. 146th	Well No.:	RMW10	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW10_011719		
Project Number:	170487003	Well Depth:	28'	Pine Number:	21058	Background PID (ppm):	0	Sample Date:	1/17/2019		
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	731.3	Sample Time:	15:25		
Sampling Personnel:	T. Goodnough	Well Screen Interval:	18-28'	Pine Number:	042076	Pump Intake Depth:	24'				
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.16				
STABILIZATION = 3 successive readings within limits											
TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft 2.68	Flow Rate (gpm) <0.13 gpm	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
14:35	14.75	7.51	-34	1.03	1000.0	4.04	19.16	0	0	dark brown, odor observed	N/A
14:40	18.04	7.20	-63	1.01	0.00	4.94	19.16	0.1	0.5	slightly brown, odor	N/A
14:45	18.51	7.18	-67	1.02	0.00	4.57	19.16	0.1	1	slightly brown, odor	N
14:50	19.04	7.18	-72	1.03	812.00	2.63	19.16	0.1	1.5	clear, odor	N
14:55	19.22	7.18	-77	1.01	265.00	2.70	19.16	0.1	2		N
15:00	19.19	7.18	-80	1.00	436.00	2.49	19.16	0.1	2.5		N
15:05	19.53	7.18	83	0.99	257.00	2.20	19.16	0.1	3		N
15:10	19.03	7.20	-86	0.99	647.0	2.68	19.16	0.1	3.5		N
15:15	18.42	7.21	-90	0.99	87.8	3.02	19.16	0.1	4		N
15:20	19.18	7.21	-92	1.00	31.1	1.85	19.16	0.1	4.5		N
15:25	19.42	7.21	-94	1.01	80.5	1.53	19.16	0.1	5		N
15:30	19.31	7.21	-95	0.99	14.7	1.44	19.16	0.1	5.5		N
15:35	19.33	7.21	-96	1.00	12.2	1.40	19.16	0.1	6		N

Notes:

- Well depths and groundwater depths were measured in feet below the top of well casing.
- Well and tubing diameters are measured in inches.
- PID = Photoionization Detector
- PPM = Parts per million
- pH = Hydrogen ion concentration
- ORP = Oxidation-reduction potential, measured in millivolts (mV)
- DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
- DTW = Depth to water
- mS/cm = milli-Siemans per centimeter
- NTU = Nephelometric Turbidity Unit
- Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information			Sampling Conditions			Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW11	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy			Sample(s):	RMW11_011719
Project Number:	170487003	Well Depth:	27.81	Pine Number:	21202	Background PID (ppm):	0.1				
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	26.2			Sample Date:	1/17/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	13-28'	Pine Number:	042076	Pump Intake Depth:	24'				
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.26			Sample Time:	13:45

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
12:33	13.73	6.96	-33	0.39	961.0	0.04	20.12		1.6	own, moderate pet	N/A
12:38	14.63	7.10	-55	0.38	736.00	0.00	20.12	0.08	2		N/A
12:43	14.79	7.13	-64	0.37	445.00	0.00	20.12	0.12	2.6		N
12:48	14.84	7.15	-70	0.37	240.00	0.00	20.12	0.13	3.25		N
12:53	14.90	7.16	-73	0.37	67.00	0.00	20.12	0.13	3.9		N
12:58	14.93	7.20	-77	0.37	31.50	0.00	20.13	0.12	4.5		N
1:03	14.98	7.20	-79	0.37	23.90	0.00	20.13	0.12	5.1		N
1:08	14.98	7.19	-80	0.37	17.4	0.00	20.14	0.1	5.6		N
1:13	14.99	7.16	-81	0.37	14.2	0.00	20.15	0.1	6.1		N
1:18	14.95	7.13	-82	0.37	10.2	0.00	20.15	0.12	6.7		N
1:23	15.00	7.14	-83	0.37	8.0	0.00	20.15	0.1	7.2		N
1:28	15.02	7.14	-83	0.37	6.8	0.00	20.15	0.1	7.7		N
1:33	15.01	7.14	-83	0.37	5.2	0.00	20.17	0.1	8.2		N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N

Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
8. DTW = Depth to water
9. mS/cm = milli-Siemans per centimeter
10. NTU = Nephelometric Turbidity Unit
11. Well did not stabilize; sampled after 1 hour of purging.

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information			
Project Name:	Gerard + E. 146th	Well No:	RMW14	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW14_011719		
Project Number:	170487003	Well Depth:	27.15	Pine Number:	21202	Background PID (ppm):	0.0				
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	35.9	Sample Date:	1/17/2019		
Sampling Personnel:	T. Goodnough	Well Screen Interval:	17-27'	Pine Number:	042076	Pump Intake Depth:	24'				
						Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.03	Sample Time:	12:00

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
10:42	11.43	7.13	-38	1.13	1000.0	1.61	19.48		0.8		N/A
10:47	12.68	7.13	-74	1.09	1000.00	0.53	19.49	0.08	1.2		N/A
10:52	14.15	7.05	-82	1.05	1000.00	0.00	19.50	0.06	1.5		N
10:57	15.24	7.05	-85	1.05	1000.00	0.00	19.50	0.18	2.4		N
11:02	15.29	7.16	-87	1.02	322.00	0.00	19.51	0.07	2.75		N
11:07	15.36	7.13	-88	0.99	187.00	0.00	19.52	0.11	3.3		N
11:12	15.38	7.08	-90	0.97	163.00	0.00	19.52	0.12	3.9		N
11:17	15.39	7.00	-91	0.98	126.0	0.00	19.52	0.12	4.5		N
11:22	15.36	6.98	-92	0.99	84.7	0.00	19.53	0.08	4.9		N
11:27	15.42	6.96	-93	1.00	33.0	0.00	19.55	0.12	5.5		N
11:32	15.51	6.91	-95	1.00	18.4	0.00	19.56	0.1	6		N
11:37	15.42	6.79	-96	0.99	27.4	0.00	19.58	0.12	6.6		N
11:42	15.40	6.77	-97	0.99	18.2	0.00	19.60	0.12	7.2		N

- Notes:**
- Well depths and groundwater depths were measured in feet below the top of well casing.
 - Well and tubing diameters are measured in inches.
 - PID = Photoionization Detector
 - PPM = Parts per million
 - pH = Hydrogen ion concentration
 - ORP = Oxidation-reduction potential, measured in millivolts (mV)
 - DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 - DTW = Depth to water
 - mS/cm = milli-Siemans per centimeter
 - NTU = Nephelometric Turbidity Unit
 - Well did not stabilize; sampled after 1 hour of purging.

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW16	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW16_011719
Project Number:	170487003	Well Depth:	27'	Pine Number:	21058	Background PID (ppm):	0		
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.4		
Sampling Personnel:	T. Goodnough	Well Screen Interval:	17-27'	Pine Number:	042076	Pump Intake Depth:	24'	Sample Date:	1/17/2019
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.89	Sample Time:	13:15

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
12:10	15.75	6.15	192	2.08	1000.0	1.33	18.90		0	turbid brown	N/A
12:15	14.07	7.02	43	1.98	601.00	0.16	18.90	0.25	1.25		N/A
12:20	18.52	7.06	23	1.98	936.00	0.00	18.89	0.03	1.4		N
12:25	17.32	7.11	17	1.99	809.00	0.00	18.87	0.04	1.6		N
12:30	19.59	7.07	9	1.98	410.00	0.00	18.86	0.03	1.75	clear	N
12:35	19.44	7.06	5	1.96	135.00	0.00	18.85	0.25	3		N
12:40	18.43	7.06	3	1.98	120.00	0.00	18.85	0.14	3.7		N
12:45	19.02	7.06	0	1.96	49.8	0.00	18.84	0.1	4.2		N
12:50	19.63	7.06	-3	1.92	34.3	0.00	18.84	0.08	4.6		N
12:55	19.68	7.07	-5	1.92	15.3	0.00	18.84	0.08	5		N
13:00	19.58	7.07	-7	1.97	1.8	0.00	18.84	0.1	5.5		N
13:05	19.51	7.08	-9	1.97	0.0	0.00	18.84	0.08	5.9		N
13:10	19.55	7.08	-10	1.97	0.0	0.00	18.84	0.08	6.3		Y

Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
8. DTW = Depth to water
9. mS/cm = milli-Siemans per centimeter
10. NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW17	Water Quality Device Model:	Horiba U-52	Weather:	30s cloudy	Sample(s):	RMW17_011719
Project Number:	170487003	Well Depth:	25.65	Pine Number:	21202	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2"	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	0.0	Sample Date:	1/17/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	18-28'	Pine Number:	042076	Pump Intake Depth:	24'	Sample Time:	9:40
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	20.09		

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
8:35	12.45	7.16	46	1.89	1000.0	0.00	23.20		0.75	urbid brown, no odor	N/A
8:40	14.38	7.24	51	1.84	887.00	0.00	23.16	0.09	1.2		N/A
8:45	14.79	7.23	23	1.82	455.00	0.00	23.09	0.06	1.5		N
8:50	15.02	7.21	6	1.79	235.00	0.00	23.05	0.06	1.8		N
8:55	14.88	7.15	-4	1.78	141.00	0.00	23.02	0.04	2		N
9:00	15.15	7.09	-14	1.74	60.10	0.00	23.00	0.08	2.4		N
9:05	15.45	7.05	-22	1.72	33.30	0.00	22.98	0.07	2.75		N
9:10	15.35	7.02	-27	1.70	36.0	0.00	22.98	0.07	3.1		N
9:15	15.44	6.97	-32	1.68	19.3	0.00	22.97	0.08	3.5		N
9:20	15.50	6.95	-35	1.67	14.2	0.00	22.97	0.08	3.9		N
9:25	15.30	6.92	-39	1.65	9.9	0.00	22.96	0.1	4.4		N
9:30	15.39	6.91	-41	1.64	6.8	0.00	22.96	0.06	4.7		N
9:35	15.36	6.92	-41	1.64	5.7	0.00	22.95	0.06	5.0		N

- Notes:**
- Well depths and groundwater depths were measured in feet below the top of well casing.
 - Well and tubing diameters are measured in inches.
 - PID = Photoionization Detector
 - PPM = Parts per million
 - pH = Hydrogen ion concentration
 - ORP = Oxidation-reduction potential, measured in millivolts (mV)
 - DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 - DTW = Depth to water
 - mS/cm = milli-Siemans per centimeter
 - NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW18	Water Quality Device Model:	Horiba U-52	Weather:	clear, 20s	Sample(s):	RMW18_011419
Project Number:	170487003	Well Depth:	27.6	Pine Number:	21202	Background PID (ppm):	0.1		
Site Location:	Bronx, NY	Well Diameter:	2-inch	Pump Make and Model:	Monsoon Pro	PID Beneath Inner Cap (ppm):	9.7	Sample Date:	1/14/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	18-28'	Pine Number:	042076	Pump Intake Depth:	24'		
				Tubing Diameter:	3/8" x 1/2"	Depth to Water Before Purge:	19.71	Sample Time:	12:27

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
13:27	14.63	9.64	-24	1.00	740.0	0.70	19.75		0.7	brown turbid no odor	N/A
13:32	14.73	9.75	-45	0.99	940.00	0.00	19.75	0.06	1		N/A
13:37	15.29	9.67	-57	0.97	504.00	0.00	19.75	0.08	1.4		N
13:42	15.49	9.59	-57	0.95	367.00	0.00	19.75	0.12	2		N
13:47	15.63	9.53	-60	0.95	187.00	0.00	19.75	0.07	2.35		N
13:52	15.60	9.50	-61	0.95	194.00	0.00	19.75	0.07	2.7	brown no odor	N
13:57	14.98	9.47	-60	0.96	93.70	0.00	19.75	0.06	3.0		N
14:02	14.24	9.58	-59	0.95	86.3	0.00	19.75	0.05	3.25		N
14:07	15.24	9.46	-59	0.94	69.9	0.00	19.75	0.05	3.5		N
14:12	14.96	9.45	-59	0.95	64.8	0.00	19.75	0.05	3.75		N
14:17	16.10	9.40	-58	0.95	72.6	0.00	19.78	0.15	4.5		N
14:22	15.76	9.39	-57	0.95	39.4	0.00	19.78	0.1	5.0		N
14:27	15.77	9.38	-58	0.95	33.8	0.00	19.78	0.09	5.45		N

- Notes:
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemans per centimeter
 10. NTU = Nephelometric Turbidity Unit

Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	Gerard + E. 146th	Well No:	RMW22	Water Quality Device Model:	Horiba U-52	Weather:	Clear-20's	Sample(s):	RMW22_011419
Project Number:	170487003	Well Depth:	27'	Pine Number:	21202	Background PID (ppm):	0.1		
Site Location:	Bronx, NY	Well Diameter:	2-inch	Pump Make and Model:	QED Sample Pro	PID Beneath Inner Cap (ppm):	0.1	Sample Date:	1/14/2019
Sampling Personnel:	T. Goodnough	Well Screen Interval:	17-27'	Pine Number:	43733	Pump Intake Depth:	25'		
				Tubing Diameter:	1/4" x 3/8"	Depth to Water Before Purge:	N/A	Sample Time:	12:22

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
11:22	12.20	9.57	159	0.50	830.0	0.64	N/A		0	turbid brown	N/A
11:27	13.10	9.53	38	0.48	670.00	0.48	N/A	0.2	1		N/A
11:32	13.36	9.77	-54	0.52	1000.00	1.13	N/A	0.12	1.6		N
11:37	13.46	9.91	-82	0.52	846.00	0.75	N/A	0.12	2.2		N
11:42	13.50	10.06	-94	0.52	678.00	0.78	N/A	0.16	3		N
11:47	12.76	10.09	-99	0.51	410.00	0.38	N/A	0.05	3.25		N
11:52	13.13	10.21	-102	0.52	369.00	1.12	N/A	0.05	3.5		N
11:57	13.27	10.17	-103	0.48	166.0	0.00	N/A	0.06	3.8		N
12:02	13.36	10.19	-102	0.47	167.0	0.00	N/A	0.1	4.3		N
12:07	13.40	10.18	-103	0.48	175.0	0.00	N/A	0.1	4.8		Y
12:12	13.41	10.17	-104	0.48	121.0	0.00	N/A	0.1	5.3		
12:17	13.41	10.16	-104	0.48	113.0	0.00	N/A	0.1	5.8		
12:22	13.41	10.15	-105	0.48	96.2	0.00	N/A	0.1	6.3		

Notes:

1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
8. DTW = Depth to water
9. mS/cm = milli-Siemans per centimeter
10. NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	404 Exterior Street	Well No.:	RMW23	Water Quality Device Model:	Horiba U52	Weather:	Sunny, 70-80F	Sample(s):	RMW23_071219
Project Number:	170487001	Well Depth:	19	Pine Number:	21054	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2	Pump Make and Model:	Peristaltic	PID Beneath Inner Cap (ppm):	0	Sample Date:	7/12/2019
Sampling Personnel:	Patrick Stovall	Well Screen Interval:	9	Pine Number:	19943	Pump Intake Depth:	18.00		
		Interval:	19	Tubing Diameter:		Depth to Water Before Purge:	13.3	Sample Time:	13:05

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) < 0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
12:15	18.41	7.25	4	0.783	171.0	0.44	13.30		0.5		N/A
12:20	17.63	7.22	-5	0.679	27.3	0.00	13.30	0.1	1		N/A
12:25	16.98	7.14	-11	0.689	15.1	0.00	13.30	0.1	1.5		N
12:30	16.95	7.08	-18	0.702	9.2	0.00	13.30	0.1	2		N
12:35	17.15	7.10	-23	0.707	6.7	0.00	13.30	0.05	2.25		N
12:40	17.06	7.10	-31	0.707	6.1	0.00	13.30	0.15	3		N
12:45	16.81	7.07	-32	0.711	5.4	0.00	13.30	0.1	3.5		N
12:50	16.88	7.07	-35	0.715	5.9	0.00	13.30	0.1	4		N
12:55	16.94	7.06	-36	0.709	5.8	0.00	13.30	0.05	4.25		Y
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N
											N

- Notes:**
1. Well depths and groundwater depths were measured in feet below the top of well casing.
 2. Well and tubing diameters are measured in inches.
 3. PID = Photoionization Detector
 4. PPM = Parts per million
 5. pH = Hydrogen ion concentration
 6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
 7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
 8. DTW = Depth to water
 9. mS/cm = milli-Siemens per centimeter
 10. NTU = Nephelometric Turbidity Unit

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Project Information		Well Information		Equipment Information		Sampling Conditions		Sampling Information	
Project Name:	404 Exterior Street	Well No:	RMW25	Water Quality Device Model:	Horiba U52	Weather:	Sunny, 70-80F	Sample(s):	RMW25_071219
Project Number:	170487001	Well Depth:	20	Pine Number:	21054	Background PID (ppm):	0.0		
Site Location:	Bronx, NY	Well Diameter:	2	Pump Make and Model:	Peristaltic	PID Beneath Inner Cap (ppm):	0	Sample Date:	7/12/2019
Sampling Personnel:	Patrick Stovall	Well Screen Interval:	10-Jan 20	Pine Number:	19943	Pump Intake Depth:	16.00	Sample Time:	10:35
				Tubing Diameter:		Depth to Water Before Purge:	12.21		

STABILIZATION = 3 successive readings within limits

TIME	TEMP °Celsius (+/- 3%)	PH (+/- 0.1)	ORP mV (+/- 10mV)	CONDUCTIVITY mS/cm (+/- 3%)	TURBIDITY ntu (+/- 10%) above 5 NTU	DO mg/l (+/- 10%) above 0.5 mg/l	DTW ft Drawdown < 0.33 ft	Flow Rate (gpm) <0.13 gpm)	Cumulative Discharge Volume (Gal)	NOTES color, odor etc.	Stabilized?
BEGIN PURGING											
9:25	20.58	6.52	199	0.649	132.0	0.49	13.20		0.25		N/A
9:30	18.86	6.69	70	0.615	125.0	0.04	13.20	0.05	0.5		N/A
9:35	16.72	6.72	2	0.637	200.0	0.08	14.05	0.05	0.75		N
9:40	16.64	6.75	-29	0.650	455.0	0.04	14.24	0.1	1.25		N
9:45	17.01	6.78	-47	0.661	458.0	0.04	14.24	0.07	1.6		N
9:50	16.82	6.79	-58	0.671	507.0	0.04	14.30	0.08	2		N
9:55	17.06	6.74	-62	0.676	325.0	0.02	14.10	0.05	2.25	light brown, no odor	N
10:00	16.96	6.77	-66	0.677	280.0	0.03	14.10	0.05	2.5		N
10:05	16.93	6.75	-66	0.681	184.0	0.00	14.20	0.05	2.75		N
10:10	16.44	6.66	-66	0.692	167.0	0.96	14.20	0.1	3.25		N
10:15	16.52	6.67	-65	0.687	135.0	0.00	14.25	0.05	3.5		N
10:20	16.68	6.71	-72	0.693	145.0	0.01	14.30	0.05	3.75		N
10:25	17.12	6.74	-76	0.699	109.0	0.07	14.30	0.1	4.25		N
10:30	16.01	6.67	-69	0.703	129.0	0.04	14.30	0.05	4.5		N

Notes:
1. Well depths and groundwater depths were measured in feet below the top of well casing.
2. Well and tubing diameters are measured in inches.
3. PID = Photoionization Detector
4. PPM = Parts per million
5. pH = Hydrogen ion concentration
6. ORP = Oxidation-reduction potential, measured in millivolts (mV)
7. DO = Dissolved Oxygen, measured in milligrams per liter (mg/L)
8. DTW = Depth to water
9. mS/cm = milli-Siemens per centimeter
10. NTU = Nephelometric Turbidity Unit
11. Well did not stabilize; sampled after 1 hour of purging.

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APPENDIX E

SOIL VAPOR CONSTRUCTION AND SAMPLE LOGS

AIR SAMPLING LOG SHEET

Sample Number: RAA01_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001	
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A	
SAMPLER: Tyler Goodnough		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018
INSPECTOR: Tyler Goodnough		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: N 5-10 mph Precipitation: None Pressure: N/A	
METHOD OF INSTALLATION AND SAMPLING: Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.2 parts per million. Sample consisted of 2.7-liter Summa canister fitted with a 2-hour flow control valve. The flow controller was zeroed and the valve opened to initiate the 2-hour sample collection. The sample and flow controller were checked each hour during sampling to ensure proper operation.			
SAMPLE DETAILS		SAMPLE LOCATION SKETCH	
HEIGHT ABOVE GROUND (FT):	3	See Sample Location Plan	
PID BEFORE SAMPLE (PPM):	0.2		
SAMPLE START TIME:	9:00		
SAMPLE STOP TIME:	11:00		
TOTAL SAMPLE TIME (MIN):	125		
REGULATOR FLOW RATE (L/MIN):	0.022		
VOLUME OF SAMPLE (LITERS):	2.7		
PID AFTER SAMPLE (PPM):	0.2		
SAMPLE MOISTURE CONTENT:	N/A		
CAN SERIAL NUMBER:	2078		
REGULATOR SERIAL NUMBER:	972		
CAN START VACUUM PRESS. (" HG):	-30.63		
CAN STOP VACUUM PRESS. (" HG):	-5.42		
NOTES			
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AIR SAMPLING LOG SHEET

Sample Number: RAA02

PROJECT: 404 Exterior Street		PROJECT NO.: 170487001	
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A	
SAMPLER: Seth Sieger		SAMPLE DATE STARTED: 7/15/2019	DATE FINISHED: 7/15/2019
INSPECTOR: Seth Sieger		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister	
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.):	
		Temp:	75-85° F
		Wind:	N 0-5 mph
		Precipitation:	None
		Pressure:	29.90 in Hg
METHOD OF INSTALLATION AND SAMPLING: Langan field screened the sample location with a MiniRAE 3000 photoionization detector prior to sampling. Sample consisted of 2.7 L Summa canister fitted with an 8-hour flow control valve. The flow controller was zeroed and valve opened to initiate the 8-hour sample collection. The sample and flow controller were checked each hour during sampling to ensure proper operation.			
SAMPLE DETAILS		SAMPLE LOCATION SKETCH	
HEIGHT ABOVE GROUND (FT):	32"	See Sample Location Plan	
PID BEFORE SAMPLE (PPM):	0.0		
SAMPLE START TIME:	9:07		
SAMPLE STOP TIME:	17:07		
TOTAL SAMPLE TIME (MIN):	480		
REGULATOR FLOW RATE (L/MIN):	0.006		
VOLUME OF SAMPLE (LITERS):	2.7		
PID AFTER SAMPLE (PPM):	0.0		
SAMPLE MOISTURE CONTENT:	N/A		
CAN SERIAL NUMBER:	202		
REGULATOR SERIAL NUMBER:	1248		
CAN START VACUUM PRESS. (" HG):	-30.1		
CAN STOP VACUUM PRESS. (" HG):	-7.03		
NOTES			
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SOIL VAPOR SAMPLING LOG SHEET
 Sample Number: RSV01_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001		
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A		
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/26/2018	DATE FINISHED: 12/26/2018	
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018	
INSTALLATION EQUIPMENT: Geoprobe® 7822 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister		
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough		
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: N 5-10 mph Precipitation: 0" Pressure: N/A		
METHOD OF INSTALLATION AND PURGING: Advance Geoprobe 7730 DT to 8 feet below grade surface (bgs), install 2-inch soil vapor probe, backfill with No. 2 sand to 6 feet bgs, seal with hydrated bentonite to 5 feet bgs, backfill with No. 2 sand to 1 foot bgs, and seal to surface with hydrated bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.2 parts per million.				
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: No. 2 Sand		
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite		
BOREHOLE DIAMETER: 3-inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand		
PURGE VOLUME (L): 1.00		IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)		DEPTH (FEET FROM SURFACE)
PURGE FLOW RATE (ML/MIN): 200				
PID AFTER PURGE (PPM): 0.2		SURFACE		
HELIUM TESTS		SURFACE		
Pre-sampling		SURFACE		
Post-sampling		SURFACE		
HELIUM TEST IN BUCKET(%): 31.0%		SURFACE		
2.7%		SURFACE		
HELIUM TEST IN TUBE (PPM): 0.0%		SURFACE		
0.0%		SURFACE		
SAMPLE START TIME: 9:27		SURFACE		
SAMPLE STOP TIME: 11:29		SURFACE		
TOTAL SAMPLE TIME (MIN): 122		SURFACE		
REGULATOR FLOW RATE (L/MIN): 0.022		SURFACE		
VOLUME OF SAMPLE (LITERS): 2.7		SURFACE		
PID AFTER SAMPLE (PPM): 0.2		SURFACE		
SAMPLE MOISTURE CONTENT: N/A		SURFACE		
CAN SERIAL NUMBER: 2206		SURFACE		
REGULATOR SERIAL NUMBER: 575		SURFACE		
CAN START VACUUM PRESS. (" HG): -29.47		SURFACE		
CAN STOP VACUUM PRESS. (" HG): -5.69		SURFACE		
SAMPLE LOCATION SKETCH				
See Sample Location Plan				
NOTES				
<p align="center">Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727</p>				

SOIL VAPOR SAMPLING LOG SHEET
 Sample Number: RSV02_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																																																																																					
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																																																																																					
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/27/2018	DATE FINISHED: 12/27/2018																																																																																				
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																																																																																				
INSTALLATION EQUIPMENT: Geoprobe® 7730 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																																																																																					
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																																																																																					
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: N 5-10 mph Precipitation: 0" Pressure: N/A																																																																																					
METHOD OF INSTALLATION AND PURGING: Advance Geoprobe 7730 DT to 9 feet below grade surface (bgs), install 2-inch soil vapor probe, backfill with No. 2 sand to 7 feet bgs, seal with hydrated bentonite to 6 feet bgs, backfill with No. 2 sand to 1 foot bgs, and seal to surface with hydrated bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.1 parts per million.																																																																																							
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: No. 2 Sand																																																																																					
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																																																																																					
BOREHOLE DIAMETER: 3-inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																																																																																					
PURGE VOLUME (L): 1.00		<table border="1"> <thead> <tr> <th colspan="2">PURGE FLOW RATE (ML/MIN):</th> <th colspan="2">200</th> <th colspan="2">PID AFTER PURGE (PPM):</th> <th colspan="2">0.1</th> <th colspan="2">HELIUM TESTS</th> <th colspan="2">Pre-sampling</th> <th colspan="2">Post-sampling</th> <th colspan="2">HELIUM TEST IN BUCKET(%):</th> <th colspan="2">13.4%</th> <th colspan="2">13.1%</th> <th colspan="2">HELIUM TEST IN TUBE (PPM):</th> <th colspan="2">0.0%</th> <th colspan="2">0.0%</th> <th colspan="2">SAMPLE START TIME:</th> <th colspan="2">9:13</th> <th colspan="2">SAMPLE STOP TIME:</th> <th colspan="2">11:17</th> <th colspan="2">TOTAL SAMPLE TIME (MIN):</th> <th colspan="2">125</th> <th colspan="2">REGULATOR FLOW RATE (L/MIN):</th> <th colspan="2">0.022</th> <th colspan="2">VOLUME OF SAMPLE (LITERS):</th> <th colspan="2">2.7</th> <th colspan="2">PID AFTER SAMPLE (PPM):</th> <th colspan="2">0.1</th> <th colspan="2">SAMPLE MOISTURE CONTENT:</th> <th colspan="2">N/A</th> <th colspan="2">CAN SERIAL NUMBER:</th> <th colspan="2">2299</th> <th colspan="2">REGULATOR SERIAL NUMBER:</th> <th colspan="2">138</th> <th colspan="2">CAN START VACUUM PRESS. (" HG):</th> <th colspan="2">-30.8</th> <th colspan="2">CAN STOP VACUUM PRESS. (" HG):</th> <th colspan="2">-4.84</th> </tr> </thead> <tbody> <tr> <td colspan="4">SAMPLE LOCATION SKETCH</td> <td colspan="2" rowspan="20"> </td> <td colspan="2" rowspan="20"> DEPTH (FEET FROM SURFACE) </td> <td colspan="2" rowspan="20"> NOTES </td> </tr> <tr> <td colspan="4">NOTES</td> </tr> </tbody> </table>		PURGE FLOW RATE (ML/MIN):		200		PID AFTER PURGE (PPM):		0.1		HELIUM TESTS		Pre-sampling		Post-sampling		HELIUM TEST IN BUCKET(%):		13.4%		13.1%		HELIUM TEST IN TUBE (PPM):		0.0%		0.0%		SAMPLE START TIME:		9:13		SAMPLE STOP TIME:		11:17		TOTAL SAMPLE TIME (MIN):		125		REGULATOR FLOW RATE (L/MIN):		0.022		VOLUME OF SAMPLE (LITERS):		2.7		PID AFTER SAMPLE (PPM):		0.1		SAMPLE MOISTURE CONTENT:		N/A		CAN SERIAL NUMBER:		2299		REGULATOR SERIAL NUMBER:		138		CAN START VACUUM PRESS. (" HG):		-30.8		CAN STOP VACUUM PRESS. (" HG):		-4.84		SAMPLE LOCATION SKETCH						DEPTH (FEET FROM SURFACE)		NOTES		NOTES			
PURGE FLOW RATE (ML/MIN):				200		PID AFTER PURGE (PPM):		0.1		HELIUM TESTS		Pre-sampling		Post-sampling		HELIUM TEST IN BUCKET(%):		13.4%		13.1%		HELIUM TEST IN TUBE (PPM):		0.0%		0.0%		SAMPLE START TIME:		9:13		SAMPLE STOP TIME:		11:17		TOTAL SAMPLE TIME (MIN):		125		REGULATOR FLOW RATE (L/MIN):		0.022		VOLUME OF SAMPLE (LITERS):		2.7		PID AFTER SAMPLE (PPM):		0.1		SAMPLE MOISTURE CONTENT:		N/A		CAN SERIAL NUMBER:		2299		REGULATOR SERIAL NUMBER:		138		CAN START VACUUM PRESS. (" HG):		-30.8		CAN STOP VACUUM PRESS. (" HG):		-4.84																	
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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV01_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																							
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																							
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/20/2018	DATE FINISHED: 12/20/2018																						
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																						
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																							
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																							
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																							
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.4 parts per million.																									
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																							
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																							
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																							
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Top of Seal</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Top of Pack</td> <td style="text-align: center;">5"</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Tube Depth</td> <td style="text-align: center;">6"</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE				Top of Seal	0			Top of Pack	5"			Tube Depth	6"	
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																				
(SEAL, FILTER, ETC.)																									
SURFACE	SURFACE																								
	Top of Seal			0																					
	Top of Pack			5"																					
	Tube Depth			6"																					
PURGE FLOW RATE (ML/MIN): 200																									
PID AFTER PURGE (PPM): 0.4																									
HELIUM TESTS																									
Pre-sampling Post-sampling																									
HELIUM TEST IN BUCKET(%): 16.9% 13.4%																									
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																									
SAMPLE START TIME: 8:55																									
SAMPLE STOP TIME: 10:55																									
TOTAL SAMPLE TIME (MIN): 120																									
REGULATOR FLOW RATE (L/MIN): 0.022																									
VOLUME OF SAMPLE (LITERS): 2.7																									
PID AFTER SAMPLE (PPM): 0.3																									
SAMPLE MOISTURE CONTENT: N/A																									
CAN SERIAL NUMBER: 2225																									
REGULATOR SERIAL NUMBER: 934																									
CAN START VACUUM PRESS. (" HG): -29																									
CAN STOP VACUUM PRESS. (" HG): -4.3																									
SAMPLE LOCATION SKETCH																									
See Sample Location Plan		NOTES																							
<p>Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727</p>																									

SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV02_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																							
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																							
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/27/2018	DATE FINISHED: 12/27/2018																						
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																						
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																							
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																							
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																							
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.4 parts per million.																									
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																							
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																							
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																							
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Top of Seal</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Top of Pack</td> <td style="text-align: center;">13"</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Tube Depth</td> <td style="text-align: center;">14"</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE				Top of Seal	0			Top of Pack	13"			Tube Depth	14"	
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																				
(SEAL, FILTER, ETC.)																									
SURFACE	SURFACE																								
	Top of Seal			0																					
	Top of Pack			13"																					
	Tube Depth			14"																					
PURGE FLOW RATE (ML/MIN): 200																									
PID AFTER PURGE (PPM): 0.4																									
HELIUM TESTS																									
Pre-sampling Post-sampling																									
HELIUM TEST IN BUCKET(%): 13.3% 14.1%																									
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																									
SAMPLE START TIME: 10:10																									
SAMPLE STOP TIME: 12:10																									
TOTAL SAMPLE TIME (MIN): 120																									
REGULATOR FLOW RATE (L/MIN): 0.027																									
VOLUME OF SAMPLE (LITERS): 2.7																									
PID AFTER SAMPLE (PPM): 0.2																									
SAMPLE MOISTURE CONTENT: N/A																									
CAN SERIAL NUMBER: 2599																									
REGULATOR SERIAL NUMBER: 1143																									
CAN START VACUUM PRESS. (" HG): -30.72																									
CAN STOP VACUUM PRESS. (" HG): -6.65																									
SAMPLE LOCATION SKETCH																									
See Sample Location Plan																									
NOTES																									

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV03_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001			
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A			
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/27/2018	DATE FINISHED: 12/27/2018		
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018		
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister			
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough			
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A			
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.4 parts per million.					
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A			
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite			
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand			
PURGE VOLUME (L): 1.00		IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)		DEPTH (FEET FROM SURFACE)	NOTES
PURGE FLOW RATE (ML/MIN): 200					
PID AFTER PURGE (PPM): 0.4		SURFACE		0	
HELIUM TESTS					
HELIUM TEST IN BUCKET(%): Pre-sampling: 20.2% Post-sampling: 15.4%					
HELIUM TEST IN TUBE (PPM): Pre-sampling: 0.0% Post-sampling: 0.0%					
SAMPLE START TIME: 10:25		Top of Seal		0	
SAMPLE STOP TIME: 12:26					
TOTAL SAMPLE TIME (MIN): 121					
REGULATOR FLOW RATE (L/MIN): 0.022		Top of Pack		13"	
VOLUME OF SAMPLE (LITERS): 2.7					
PID AFTER SAMPLE (PPM): 0.2					
SAMPLE MOISTURE CONTENT: N/A		Tube Depth		14"	
CAN SERIAL NUMBER: 174					
REGULATOR SERIAL NUMBER: 387					
CAN START VACUUM PRESS. (" HG): -30.8					
CAN STOP VACUUM PRESS. (" HG): -5.99					
SAMPLE LOCATION SKETCH					
See Sample Location Plan					
NOTES					

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV04_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																							
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																							
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/27/2018	DATE FINISHED: 12/27/2018																						
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																						
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																							
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																							
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																							
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.5 parts per million.																									
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																							
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																							
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																							
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Top of Seal</td> <td></td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td style="text-align: center;">Top of Pack</td> <td></td> <td style="text-align: center;">13"</td> <td></td> </tr> <tr> <td style="text-align: center;">Tube Depth</td> <td></td> <td style="text-align: center;">14"</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE			Top of Seal		0		Top of Pack		13"		Tube Depth		14"	
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																				
(SEAL, FILTER, ETC.)																									
SURFACE	SURFACE																								
Top of Seal				0																					
Top of Pack				13"																					
Tube Depth				14"																					
PURGE FLOW RATE (ML/MIN): 200																									
PID AFTER PURGE (PPM): 0.5																									
HELIUM TESTS																									
Pre-sampling Post-sampling																									
HELIUM TEST IN BUCKET(%): 15.9% 12.9%																									
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																									
SAMPLE START TIME: 10:34																									
SAMPLE STOP TIME: 12:38																									
TOTAL SAMPLE TIME (MIN): 124																									
REGULATOR FLOW RATE (L/MIN): 0.022																									
VOLUME OF SAMPLE (LITERS): 2.7																									
PID AFTER SAMPLE (PPM): 0.3																									
SAMPLE MOISTURE CONTENT: N/A																									
CAN SERIAL NUMBER: 2347																									
REGULATOR SERIAL NUMBER: 401																									
CAN START VACUUM PRESS. (" HG): -29.9																									
CAN STOP VACUUM PRESS. (" HG): -6.23																									
SAMPLE LOCATION SKETCH																									
See Sample Location Plan																									
NOTES																									

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV05_010919

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																								
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																								
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/20/2018	DATE FINISHED: 12/20/2018																							
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 1/9/2019	DATE FINISHED: 1/9/2019																							
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																								
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																								
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																								
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.5 parts per million.																										
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																								
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																								
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																								
PURGE VOLUME (L): 1.00		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align:center;">IMPLANT/PROBE DETAILS</th> <th style="text-align:center;">DEPTH</th> <th rowspan="2" style="text-align:center;">NOTES</th> </tr> <tr> <th colspan="2" style="text-align:center;">(SEAL, FILTER, ETC.)</th> <th style="text-align:center;">(FEET FROM SURFACE)</th> </tr> </thead> <tbody> <tr> <td style="text-align:center;">SURFACE</td> <td style="text-align:center;">SURFACE</td> <td></td> <td></td> </tr> <tr> <td style="text-align:center;"> </td> <td style="text-align:center;"> </td> <td style="text-align:center;">Top of Seal</td> <td style="text-align:center;">0</td> </tr> <tr> <td style="text-align:center;"> </td> <td style="text-align:center;"> </td> <td style="text-align:center;">Top of Pack</td> <td style="text-align:center;">3"</td> </tr> <tr> <td style="text-align:center;"> </td> <td style="text-align:center;"> </td> <td style="text-align:center;">Tube Depth</td> <td style="text-align:center;">4"</td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH	NOTES	(SEAL, FILTER, ETC.)		(FEET FROM SURFACE)	SURFACE	SURFACE					Top of Seal	0			Top of Pack	3"			Tube Depth	4"
IMPLANT/PROBE DETAILS				DEPTH	NOTES																					
(SEAL, FILTER, ETC.)				(FEET FROM SURFACE)																						
SURFACE	SURFACE																									
				Top of Seal	0																					
				Top of Pack	3"																					
				Tube Depth	4"																					
PURGE FLOW RATE (ML/MIN): 200																										
PID AFTER PURGE (PPM): 0.5																										
HELIUM TESTS																										
Pre-sampling Post-sampling																										
HELIUM TEST IN BUCKET(%): 17.9% 15.2%																										
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																										
SAMPLE START TIME: 9:16																										
SAMPLE STOP TIME: 11:59																										
TOTAL SAMPLE TIME (MIN): 163																										
REGULATOR FLOW RATE (L/MIN): 0.017																										
VOLUME OF SAMPLE (LITERS): 2.7																										
PID AFTER SAMPLE (PPM): 0.2																										
SAMPLE MOISTURE CONTENT: N/A																										
CAN SERIAL NUMBER: 353																										
REGULATOR SERIAL NUMBER: 624																										
CAN START VACUUM PRESS. (" HG): -29.95																										
CAN STOP VACUUM PRESS. (" HG): -11.38																										
SAMPLE LOCATION SKETCH		NOTES																								
See Sample Location Plan																										

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV06_010919

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																							
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																							
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/20/2018	DATE FINISHED: 12/20/2018																						
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 1/9/2019	DATE FINISHED: 1/9/2019																						
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																							
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																							
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																							
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.3 parts per million.																									
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																							
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																							
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																							
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;">Top of Seal</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;">Top of Pack</td> <td style="text-align: center;">9"</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;">Tube Depth</td> <td style="text-align: center;">10"</td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE					Top of Seal	0			Top of Pack	9"			Tube Depth	10"
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																				
(SEAL, FILTER, ETC.)																									
SURFACE	SURFACE																								
				Top of Seal	0																				
				Top of Pack	9"																				
				Tube Depth	10"																				
PURGE FLOW RATE (ML/MIN): 200																									
PID AFTER PURGE (PPM): 0.3																									
HELIUM TESTS																									
Pre-sampling Post-sampling																									
HELIUM TEST IN BUCKET(%): 22.3% 24.3%																									
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																									
SAMPLE START TIME: 8:33																									
SAMPLE STOP TIME: 10:35																									
TOTAL SAMPLE TIME (MIN): 122																									
REGULATOR FLOW RATE (L/MIN): 0.022																									
VOLUME OF SAMPLE (LITERS): 2.7																									
PID AFTER SAMPLE (PPM): 0.2																									
SAMPLE MOISTURE CONTENT: N/A																									
CAN SERIAL NUMBER: 207																									
REGULATOR SERIAL NUMBER: 854																									
CAN START VACUUM PRESS. (" HG): -29.79																									
CAN STOP VACUUM PRESS. (" HG): -3.55																									
SAMPLE LOCATION SKETCH																									
See Sample Location Plan																									
NOTES																									

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET

Sample Number: RSSV07_123118

PROJECT: Gerard Avenue and East 146th Street		PROJECT NO.: 170487001																							
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																							
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services, Corp.		INSTALLATION DATE STARTED: 12/20/2018	DATE FINISHED: 12/20/2018																						
INSTALLATION FOREMAN: Ron Dixon		SAMPLE DATE STARTED: 12/31/2018	DATE FINISHED: 12/31/2018																						
INSTALLATION EQUIPMENT: Hammer Drill		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																							
INSPECTOR: Tyler Goodnough		SAMPLER: Tyler Goodnough																							
POTENTIAL SAMPLE INTERFERENCES: N/A		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 40s Wind: Indoors Precipitation: Indoors Pressure: N/A																							
METHOD OF INSTALLATION AND PURGING: Advanced subslab vapor point to 2-inches below the bottom of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. Maximum PID readings were detected at 0.2 parts per million.																									
TUBING TYPE/DIAMETER: 1/4-Inch Teflon-lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: N/A																							
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																							
BOREHOLE DIAMETER: 3/4-Inch		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																							
PURGE VOLUME (L): 1.00		<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SURFACE</td> <td style="text-align: center;">SURFACE</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Top of Seal</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Top of Pack</td> <td style="text-align: center;">9"</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Tube Depth</td> <td style="text-align: center;">10"</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE				Top of Seal	0			Top of Pack	9"			Tube Depth	10"	
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																				
(SEAL, FILTER, ETC.)																									
SURFACE	SURFACE																								
	Top of Seal			0																					
	Top of Pack			9"																					
	Tube Depth			10"																					
PURGE FLOW RATE (ML/MIN): 200																									
PID AFTER PURGE (PPM): 0.2																									
HELIUM TESTS																									
Pre-sampling Post-sampling																									
HELIUM TEST IN BUCKET(%): 26.2% 17.4%																									
HELIUM TEST IN TUBE (PPM): 0.0% 0.0%																									
SAMPLE START TIME: 9:51																									
SAMPLE STOP TIME: 11:53																									
TOTAL SAMPLE TIME (MIN): 122																									
REGULATOR FLOW RATE (L/MIN): 0.022																									
VOLUME OF SAMPLE (LITERS): 2.7																									
PID AFTER SAMPLE (PPM): 0.1																									
SAMPLE MOISTURE CONTENT: N/A																									
CAN SERIAL NUMBER: 2210																									
REGULATOR SERIAL NUMBER: 507																									
CAN START VACUUM PRESS. (" HG): -30.33																									
CAN STOP VACUUM PRESS. (" HG): -6.41																									
SAMPLE LOCATION SKETCH																									
See Sample Location Plan																									
NOTES																									

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SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET
 Sample Number: RSSV08_071119

PROJECT: 404 Exterior Street		PROJECT NO.: 170487001																									
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: N/A																									
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services Corp.		INSTALLATION DATE STARTED: 7/11/2019	DATE FINISHED: 7/11/2019																								
INSTALLATION FOREMAN: Adam Hutchinson		SAMPLE DATE STARTED: 7/15/2019	DATE FINISHED: 7/15/2019																								
INSTALLATION EQUIPMENT: Geoprobe® 7730 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																									
INSPECTOR: Patrick Stovall		SAMPLER: Seth Sieger																									
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 75-85° F Wind: N 0-5 mph Precipitation: None Pressure: 29.90 in Hg																									
METHOD OF INSTALLATION AND PURGING: AARCO advanced subslab vapor point to 3-inches below the top of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. PID reading was 0.0 ppm.																											
TUBING TYPE/DIAMETER: 3/16-inch ID, 1/4-inch OD Teflon-Lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: None																									
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																									
BOREHOLE DIAMETER: 5/8"		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																									
PURGE VOLUME (L): 0.02		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align:center;">IMPLANT/PROBE DETAILS</th> <th style="text-align:center;">DEPTH</th> <th style="text-align:center;">NOTES</th> </tr> <tr> <th colspan="2" style="text-align:center;">(SEAL, FILTER, ETC.)</th> <th style="text-align:center;">(FEET FROM SURFACE)</th> <th></th> </tr> <tr> <th style="text-align:center;">SURFACE</th> <th style="text-align:center;">SURFACE</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td style="text-align:center;">Top of Seal</td> <td style="text-align:center;">0.0</td> <td></td> <td></td> </tr> <tr> <td style="text-align:center;">Top of Pack</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align:center;">Tube Depth</td> <td style="text-align:center;">0.4</td> <td></td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH	NOTES	(SEAL, FILTER, ETC.)		(FEET FROM SURFACE)		SURFACE	SURFACE			Top of Seal	0.0			Top of Pack				Tube Depth	0.4		
IMPLANT/PROBE DETAILS				DEPTH	NOTES																						
(SEAL, FILTER, ETC.)				(FEET FROM SURFACE)																							
SURFACE	SURFACE																										
Top of Seal	0.0																										
Top of Pack																											
Tube Depth	0.4																										
PURGE FLOW RATE (ML/MIN): 200																											
PID AFTER PURGE (PPM): 0																											
HELIUM TESTS																											
Pre-sampling Post-sampling																											
HELIUM TEST IN BUCKET(%): 17.2% 16.4%																											
HELIUM TEST IN TUBE (PPM): 0.0 0.0																											
SAMPLE START TIME: 9:04																											
SAMPLE STOP TIME: 17:04																											
TOTAL SAMPLE TIME (MIN): 480																											
REGULATOR FLOW RATE (L/MIN): 0.006																											
VOLUME OF SAMPLE (LITERS): 2.7																											
PID AFTER SAMPLE (PPM): 0																											
SAMPLE MOISTURE CONTENT: N/A																											
CAN SERIAL NUMBER: 195																											
REGULATOR SERIAL NUMBER: 396																											
CAN START VACUUM PRESS. (" HG): -29.94																											
CAN STOP VACUUM PRESS. (" HG): -17.88																											
SAMPLE LOCATION SKETCH		NOTES																									
See Sample Location Plan		RSSV09 was adjacent to RB25																									

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.
 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

SUB-SLAB SOIL VAPOR SAMPLING LOG SHEET
 Sample Number: RSSV09_071119

PROJECT: 404 Exterior Street		PROJECT NO.: 170487001																					
LOCATION: Bronx, NY		SURFACE ELEVATION AND DATUM: n/a																					
DRILLING FIRM OR LANGAN INSTALLER: AARCO Environmental Services Corp.		INSTALLATION DATE STARTED: 7/11/2019	DATE FINISHED: 7/11/2019																				
INSTALLATION FOREMAN: Adam Hutchinson		SAMPLE DATE STARTED: 7/15/2019	DATE FINISHED: 7/15/2019																				
INSTALLATION EQUIPMENT: Geoprobe® 7730 DT		TYPE OF SAMPLING DEVICE: 2.7-Liter Summa Canister																					
INSPECTOR: Patrick Stovall		SAMPLER: Seth Sieger																					
POTENTIAL SAMPLE INTERFERENCES: None		WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Temp: 75-85° F Wind: N 0-5 mph Precipitation: None Pressure: 29.90 in Hg																					
METHOD OF INSTALLATION AND PURGING: AARCO advanced subslab vapor point to 3-inches below the top of the slab. A small amount of No. 2 sand was backfilled into the borehole to set the vapor tubing. No. 2 sand was backfilled around the tubing to 1 inch bgs, and the remainder of the borehole was sealed with bentonite. Langan field screened the sample location with a MiniRAE 3000 photoionization detector (PID) prior to sampling. PID reading was 0.0 ppm.																							
TUBING TYPE/DIAMETER: 3/16-inch ID, 1/4-inch OD Teflon-Lined Polyethylene Tubing		TYPE OF MATERIAL ABOVE SEAL: None																					
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: None		SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite																					
BOREHOLE DIAMETER: 5/8"		FILTER PACK MATERIAL (Sand or Glass Beads): No. 2 Sand																					
PURGE VOLUME (L): 0.02		<table border="1"> <thead> <tr> <th colspan="2">IMPLANT/PROBE DETAILS</th> <th rowspan="2">DEPTH (FEET FROM SURFACE)</th> <th rowspan="2">NOTES</th> </tr> <tr> <th colspan="2">(SEAL, FILTER, ETC.)</th> </tr> <tr> <th>SURFACE</th> <th>SURFACE</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td align="center" rowspan="3"> </td> <td align="center">Top of Seal</td> <td align="center">0.0</td> <td></td> </tr> <tr> <td align="center">Top of Pack</td> <td></td> <td></td> </tr> <tr> <td align="center">Tube Depth</td> <td align="center">0.416</td> <td></td> </tr> </tbody> </table>		IMPLANT/PROBE DETAILS		DEPTH (FEET FROM SURFACE)	NOTES	(SEAL, FILTER, ETC.)		SURFACE	SURFACE				Top of Seal	0.0		Top of Pack			Tube Depth	0.416	
IMPLANT/PROBE DETAILS				DEPTH (FEET FROM SURFACE)	NOTES																		
(SEAL, FILTER, ETC.)																							
SURFACE	SURFACE																						
	Top of Seal			0.0																			
	Top of Pack																						
	Tube Depth			0.416																			
PURGE FLOW RATE (ML/MIN): 200																							
PID AFTER PURGE (PPM): 0																							
HELIUM TESTS																							
Pre-sampling Post-sampling																							
HELIUM TEST IN BUCKET(%): 15.8% 15.4%																							
HELIUM TEST IN TUBE (PPM): 0.0 0.0																							
SAMPLE START TIME: 9:01																							
SAMPLE STOP TIME: 17:01																							
TOTAL SAMPLE TIME (MIN): 480																							
REGULATOR FLOW RATE (L/MIN): 0.006																							
VOLUME OF SAMPLE (LITERS): 2.7																							
PID AFTER SAMPLE (PPM): 0																							
SAMPLE MOISTURE CONTENT: N/A																							
CAN SERIAL NUMBER: 411																							
REGULATOR SERIAL NUMBER: 435																							
CAN START VACUUM PRESS. (" HG): -30.01																							
CAN STOP VACUUM PRESS. (" HG): -18.51																							
SAMPLE LOCATION SKETCH																							
See Sample Location Plan		NOTES																					
		RSSV09 was adjacent to RB28																					

Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology D.P.C.
 21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

APPENDIX F

DATA USABILITY SUMMARY REPORTS

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 13, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Groundwater Samples Collected in January 2019
Langan Project No.: 170487003

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of groundwater samples collected in January 2019 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the Site") in Bronx, NY. The samples were analyzed by Alpha Analytical Laboratories of Westborough, MA (NYSDOH ELAP registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCB), perfluorinated alkyl substances (PFAS), total and dissolved metals including mercury (Hg), hexavalent chromium, and total cyanide by the analytical methods listed below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Methods 8270D and 8270D SIM
- Pesticides by SW-846 Method 8081B
- Herbicides by SW-846 Method 8151A
- PCBs by SW-846 Method 8082A
- PFAS by EPA Method 537M
- Total and Dissolved Metals by SW-846 Method 6020B
- Total and Dissolved Hg by SW-846 Method 7470A
- Hexavalent Chromium by SW-846 Method 7196A
- Total Cyanide by SW-846 Method 9012B

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

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TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1901689	L1901689-01	RMW18_011419	01/14/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1901689	L1901689-02	RMW22_011419	01/14/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1901689	L1901689-03	GWFB01_011419	01/14/19	PFAs, 1,4-Dioxane
L1901689	L1901689-04	GWTB01_011419	01/14/19	VOCs
L1901865	L1901865-01	RMW03_011519	01/15/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1901865	L1901865-02	RMW04_011519	01/15/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1901865	L1901865-03	RMW05_011519	01/15/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1901865	L1901865-04	GWDUP01_011519	01/15/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1901865	L1901865-05	GWTB02_011519	01/15/19	VOCs
L1902070	L1902070-01	RMW01_011619	01/16/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1902070	L1902070-02	RMW07_011619	01/16/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1902070	L1902070-03	RMW09_11619	01/16/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1902070	L1902070-04	GWFB02_011619	01/16/19	VOCs, SVOCs, Pest/Herb, PCBs, PFAs, Metals, Hg, Cr(VI), CN
L1902070	L1902070-05	GWTB03_011619	01/16/19	VOCs
L1902340	L1902340-01	RMW10_011719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-02	RMW11_011719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-03	RMW14_011719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-04	RMW16_11719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-05	RMW17_011719	01/17/19	VOCs, SVOCs, Pest/Herb, PCBs, Metals, Hg, Cr (VI), CN
L1902340	L1902340-06	GWTB04_011719	01/17/19	VOCs

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Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-36A, "Pesticide Data Validation" (October 2016, Revision 1), USEPA Region II SOP #HW-3b, "ICP-MS Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and Cyanide Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, serial dilutions, dual column performance, field duplicate, and trip blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

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If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION:

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RMW18_011419	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW18_011419	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW18_011419	8151A	93-76-5	2,4,5-T	UJ
RMW18_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
RMW18_011419	8260C	123-91-1	1,4-Dioxane	UJ
RMW18_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW18_011419	8260C	74-83-9	Bromomethane	UJ
RMW18_011419	8260C	74-87-3	Chloromethane	UJ
RMW18_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW18_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW18_011419	8270D	95-94-3	1,2,4,5-Tetrachlorobenzene	UJ
RMW18_011419	8270D	100-02-7	4-Nitrophenol	UJ
RMW18_011419	8270D	77-47-4	Hexachlorocyclopentadiene	UJ
RMW22_011419	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW22_011419	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW22_011419	8151A	93-76-5	2,4,5-T	UJ
RMW22_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
RMW22_011419	8260C	123-91-1	1,4-Dioxane	UJ
RMW22_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW22_011419	8260C	74-83-9	Bromomethane	UJ
RMW22_011419	8260C	74-87-3	Chloromethane	UJ
RMW22_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW22_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW22_011419	8270D	95-94-3	1,2,4,5-Tetrachlorobenzene	UJ
RMW22_011419	8270D	100-02-7	4-Nitrophenol	UJ
RMW22_011419	8270D	77-47-4	Hexachlorocyclopentadiene	UJ
RMW22_011419	537(M)	27619-97-2	6:2FTS	U (1.8)
RMW22_011419	537(M)	1763-23-1	Perfluorooctanesulfonic Acid	J
GWFB01_011419	537(M)	27619-97-2	6:2FTS	U (1.77)
GWTB01_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
GWTB01_011419	8260C	123-91-1	1,4-Dioxane	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
GWTB01_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWTB01_011419	8260C	74-83-9	Bromomethane	UJ
GWTB01_011419	8260C	74-87-3	Chloromethane	UJ
GWTB01_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWTB01_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW18_011419	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW18_011419	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW18_011419	8151A	93-76-5	2,4,5-T	UJ
RMW18_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
RMW18_011419	8260C	123-91-1	1,4-Dioxane	UJ
RMW18_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW18_011419	8260C	74-83-9	Bromomethane	UJ
RMW18_011419	8260C	74-87-3	Chloromethane	UJ
RMW18_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW18_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW18_011419	8270D	95-94-3	1,2,4,5-Tetrachlorobenzene	UJ
RMW18_011419	8270D	100-02-7	4-Nitrophenol	UJ
RMW18_011419	8270D	77-47-4	Hexachlorocyclopentadiene	UJ
RMW22_011419	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW22_011419	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW22_011419	8151A	93-76-5	2,4,5-T	UJ
RMW22_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
RMW22_011419	8260C	123-91-1	1,4-Dioxane	UJ
RMW22_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW22_011419	8260C	74-83-9	Bromomethane	UJ
RMW22_011419	8260C	74-87-3	Chloromethane	UJ
RMW22_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW22_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW22_011419	8270D	95-94-3	1,2,4,5-Tetrachlorobenzene	UJ
RMW22_011419	8270D	100-02-7	4-Nitrophenol	UJ
RMW22_011419	8270D	77-47-4	Hexachlorocyclopentadiene	UJ
RMW22_011419	537(M)	27619-97-2	6:2FTS	U (1.8)
RMW22_011419	537(M)	1763-23-1	Perfluorooctanesulfonic Acid	J
GWFB01_011419	537(M)	27619-97-2	6:2FTS	U (1.77)
GWTB01_011419	8260C	75-35-4	1,1-Dichloroethene	UJ
GWTB01_011419	8260C	123-91-1	1,4-Dioxane	UJ
GWTB01_011419	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWTB01_011419	8260C	74-83-9	Bromomethane	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
GWTB01_011419	8260C	74-87-3	Chloromethane	UJ
GWTB01_011419	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWTB01_011419	8260C	75-01-4	Vinyl chloride	UJ
RMW03_011519	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW03_011519	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW03_011519	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW03_011519	6020B	7440-28-0	Thallium, Dissolved	U (0.0005)
RMW03_011519	8081B	8001-35-2	Toxaphene	UJ
RMW03_011519	8151A	93-76-5	2,4,5-T	UJ
RMW03_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW03_011519	8260C	74-83-9	Bromomethane	UJ
RMW03_011519	8260C	74-87-3	Chloromethane	UJ
RMW03_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW03_011519	8260C	75-01-4	Vinyl chloride	UJ
RMW03_011519	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW03_011519	8270D	91-94-1	3,3'-Dichlorobenzidine	UJ
RMW03_011519	8270D	106-47-8	4-Chloroaniline	UJ
RMW03_011519	8270D	85-68-7	Butyl benzyl phthalate	UJ
RMW03_011519	8270D SIM	87-86-5	Pentachlorophenol	U (0.8)
RMW04_011519	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW04_011519	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW04_011519	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW04_011519	6020B	7440-28-0	Thallium, Dissolved	U (0.0005)
RMW04_011519	6020B	7440-28-0	Thallium, Total	U (0.0005)
RMW04_011519	7470A	7439-97-6	Mercury, Dissolved	UJ
RMW04_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW04_011519	8260C	74-83-9	Bromomethane	UJ
RMW04_011519	8260C	74-87-3	Chloromethane	UJ
RMW04_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW04_011519	8260C	75-01-4	Vinyl chloride	UJ
RMW04_011519	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW04_011519	8270D	91-94-1	3,3'-Dichlorobenzidine	UJ
RMW04_011519	8270D	106-47-8	4-Chloroaniline	UJ
RMW04_011519	8270D	85-68-7	Butyl benzyl phthalate	UJ
RMW05_011519	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW05_011519	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW05_011519	8081B	8001-35-2	Toxaphene	UJ
RMW05_011519	8151A	93-76-5	2,4,5-T	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RMW05_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
RMW05_011519	8260C	74-83-9	Bromomethane	UJ
RMW05_011519	8260C	74-87-3	Chloromethane	UJ
RMW05_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW05_011519	8260C	75-01-4	Vinyl chloride	UJ
RMW05_011519	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW05_011519	8270D	91-94-1	3,3'-Dichlorobenzidine	UJ
RMW05_011519	8270D	106-47-8	4-Chloroaniline	UJ
RMW05_011519	8270D	85-68-7	Butyl benzyl phthalate	UJ
RMW05_011519	8270D SIM	87-86-5	Pentachlorophenol	U (0.8)
GWDUP01_011519	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
GWDUP01_011519	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
GWDUP01_011519	8081B	8001-35-2	Toxaphene	UJ
GWDUP01_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWDUP01_011519	8260C	74-83-9	Bromomethane	UJ
GWDUP01_011519	8260C	74-87-3	Chloromethane	UJ
GWDUP01_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWDUP01_011519	8260C	75-01-4	Vinyl chloride	UJ
GWDUP01_011519	8270D	105-67-9	2,4-Dimethylphenol	UJ
GWDUP01_011519	8270D	91-94-1	3,3'-Dichlorobenzidine	UJ
GWDUP01_011519	8270D	106-47-8	4-Chloroaniline	UJ
GWDUP01_011519	8270D	85-68-7	Butyl benzyl phthalate	UJ
GWDUP01_011519	8270D SIM	87-86-5	Pentachlorophenol	U (0.8)
GWTB02_011519	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWTB02_011519	8260C	74-83-9	Bromomethane	UJ
GWTB02_011519	8260C	74-87-3	Chloromethane	UJ
GWTB02_011519	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWTB02_011519	8260C	75-01-4	Vinyl chloride	UJ
RMW03_011519	8270D SIM	91-57-6	2-Methylnaphthalene	UJ
GWDUP01_011519	8270D SIM	91-57-6	2-Methylnaphthalene	J
RMW03_011519	8270D SIM	50-32-8	Benzo(a)pyrene	J
GWDUP01_011519	8270D SIM	50-32-8	Benzo(a)pyrene	J
RMW03_011519	9012B	57-12-5	Cyanide, Total	J
GWDUP01_011519	9012B	57-12-5	Cyanide, Total	J
RMW01_011619	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW01_011619	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW01_011619	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW01_011619	8260C	594-20-7	2,2-Dichloropropane	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RMW01_011619	8260C	74-83-9	Bromomethane	UJ
RMW01_011619	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW01_011619	8270D	95-95-4	2,4,5-Trichlorophenol	UJ
RMW01_011619	8270D	88-06-2	2,4,6-Trichlorophenol	UJ
RMW01_011619	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW01_011619	8270D	606-20-2	2,6-Dinitrotoluene	UJ
RMW01_011619	8270D	106-47-8	4-Chloroaniline	UJ
RMW01_011619	8270D	65-85-0	Benzoic Acid	UJ
RMW01_011619	8270D	131-11-3	Dimethyl phthalate	UJ
RMW07_011619	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW07_011619	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW07_011619	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW07_011619	6020B	7439-89-6	Iron, Dissolved	U (0.05)
RMW07_011619	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW07_011619	8260C	74-83-9	Bromomethane	UJ
RMW07_011619	8260C	75-71-8	Dichlorodifluoromethane	UJ
RMW07_011619	8270D	95-95-4	2,4,5-Trichlorophenol	UJ
RMW07_011619	8270D	88-06-2	2,4,6-Trichlorophenol	UJ
RMW07_011619	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW07_011619	8270D	606-20-2	2,6-Dinitrotoluene	UJ
RMW07_011619	8270D	106-47-8	4-Chloroaniline	UJ
RMW07_011619	8270D	65-85-0	Benzoic Acid	UJ
RMW07_011619	8270D	131-11-3	Dimethyl phthalate	UJ
RMW07_011619	537(M)	27619-97-2	6:2FTS	U (1.82)
RMW09_011619	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW09_011619	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW09_011619	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
RMW09_011619	8260C	123-91-1	1,4-Dioxane	UJ
RMW09_011619	8260C	74-83-9	Bromomethane	UJ
RMW09_011619	8260C	87-68-3	Hexachlorobutadiene	UJ
RMW09_011619	8270D	95-95-4	2,4,5-Trichlorophenol	UJ
RMW09_011619	8270D	88-06-2	2,4,6-Trichlorophenol	UJ
RMW09_011619	8270D	105-67-9	2,4-Dimethylphenol	UJ
RMW09_011619	8270D	606-20-2	2,6-Dinitrotoluene	UJ
RMW09_011619	8270D	106-47-8	4-Chloroaniline	UJ
RMW09_011619	8270D	65-85-0	Benzoic Acid	UJ
RMW09_011619	8270D	131-11-3	Dimethyl phthalate	UJ
RMW09_011619	537(M)	27619-97-2	6:2FTS	U (1.57)

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RMW09_011619	537(M)	2991-50-6	NEtFOSAA	U (2.07)
GWFB02_011619	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
GWFB02_011619	6020B	7440-47-3	Chromium, Dissolved	U (0.001)
GWFB02_011619	6020B	7439-89-6	Iron, Dissolved	U (0.05)
GWFB02_011619	6020B	7439-89-6	Iron, Total	U (0.05)
GWFB02_011619	8260C	75-35-4	1,1-Dichloroethene	UJ
GWFB02_011619	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWFB02_011619	8260C	74-83-9	Bromomethane	UJ
GWFB02_011619	8260C	74-87-3	Chloromethane	UJ
GWFB02_011619	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWFB02_011619	8260C	75-01-4	Vinyl chloride	UJ
GWFB02_011619	8270D	95-95-4	2,4,5-Trichlorophenol	UJ
GWFB02_011619	8270D	88-06-2	2,4,6-Trichlorophenol	UJ
GWFB02_011619	8270D	105-67-9	2,4-Dimethylphenol	UJ
GWFB02_011619	8270D	606-20-2	2,6-Dinitrotoluene	UJ
GWFB02_011619	8270D	106-47-8	4-Chloroaniline	UJ
GWFB02_011619	8270D	65-85-0	Benzoic Acid	UJ
GWFB02_011619	8270D	131-11-3	Dimethyl phthalate	UJ
GWFB02_011619	537(M)	27619-97-2	6:2FTS	J
GWTB03_011619	8260C	75-35-4	1,1-Dichloroethene	UJ
GWTB03_011619	8260C	108-10-1	4-Methyl-2-pentanone	UJ
GWTB03_011619	8260C	74-83-9	Bromomethane	UJ
GWTB03_011619	8260C	74-87-3	Chloromethane	UJ
GWTB03_011619	8260C	75-71-8	Dichlorodifluoromethane	UJ
GWTB03_011619	8260C	75-01-4	Vinyl chloride	UJ
RMW10_011719	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW10_011719	8081B	8001-35-2	Toxaphene	UJ
RMW10_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	J
RMW10_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW10_011719	8270D SIM	208-96-8	Acenaphthylene	J
RMW11_011719	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW11_011719	8081B	8001-35-2	Toxaphene	UJ
RMW11_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	J
RMW11_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW11_011719	8270D SIM	208-96-8	Acenaphthylene	J
RMW14_011719	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW14_011719	8081B	8001-35-2	Toxaphene	UJ
RMW14_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	J

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RMW14_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW14_011719	8270D SIM	208-96-8	Acenaphthylene	J
RMW16_011719	6020B	7440-36-0	Antimony, Dissolved	U (0.004)
RMW16_011719	6020B	7440-36-0	Antimony, Total	U (0.004)
RMW16_011719	8081B	8001-35-2	Toxaphene	UJ
RMW16_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	UJ
RMW16_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW16_011719	8270D SIM	208-96-8	Acenaphthylene	UJ
RMW17_011719	8081B	8001-35-2	Toxaphene	UJ
RMW17_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	UJ
RMW17_011719	8260C	594-20-7	2,2-Dichloropropane	UJ
RMW17_011719	8270D SIM	208-96-8	Acenaphthylene	J
GWTB04_011719	8260C	95-93-2	1,2,4,5-Tetramethylbenzene	UJ
GWTB04_011719	8260C	594-20-7	2,2-Dichloropropane	UJ

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1901689

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) WG1198696-3/4 exhibited a percent recovery or relative percent difference (RPD) outside of the control limits for chloromethane (54% LCS/55% LCSD), bromomethane (29% LCSD; 39% RPD), and 4-methyl-2-pentanone (22% RPD). The associated results for samples RMW18_011419, RMW22_011419, and GWTB01_011419 are qualified as "UJ" based on potential low and indeterminate bias.

The initial calibration (ICAL) for instrument VOA122 exhibited an average RF below the control limit for 1,4-dioxane (0.001). The associated results for samples RMW18_011419, RMW22_011419, and GWTB01_011419 are qualified as "UJ" based on potential low bias.

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The continuing calibration verification (CCV) for instrument VOA122 on 1/17/19 at 7:21 exhibited a percent difference above the control limit for dichlorodifluoromethane (43.6%), chloromethane (46.2%), vinyl chloride (25.6%), bromomethane (57%), and 1,1-dichloroethene (21.6%). The associated results for samples RMW18_011419, RMW22_011419, and GWTB01_011419 are qualified as "UJ" due to potential indeterminate bias. The chloromethane and bromomethane results were previously qualified based on the LCS/LCSD recoveries.

L1901865

The LCS/LCSD WG1198696-3/4 exhibited a percent difference below the control limit or an RPD above the control limit for chloromethane (54%/55%), bromomethane (29% LCSD; 39% RPD), and 4-methyl-2-pentanone (22% RPD). The associated results for samples RMW03_011519, RMW04_011519, RMW05_011519, GWDUP01_011519, and GWTB02_011519 are qualified as "UJ" based on potential low or indeterminate bias.

The CCV for instrument VOA122 exhibited a percent difference above the control limit for dichlorodifluoromethane (43.6%), chloromethane (46.2%), vinyl chloride (25.6%), bromomethane (57%), and 1,1-dichloroethene (21.6%). The associated results for samples RMW03_011519, RMW04_011519, RMW05_011519, GWDUP01_011519, and GWTB02_011519 are qualified as "UJ" based on potential low bias. The chloromethane and bromomethane results were previously qualified based on the LCS/LCSD recoveries.

L1902070

The LCS/LCSD WG1198696-3/4 exhibited a percent difference below the control limit or RPD above the control limit for chloromethane (54%/55%), bromomethane (29% LCSD; 39% RPD), and 4-methyl-2-pentanone (22% RPD). The associated results for samples GWFB02_011619 and GWTB03_011619 are qualified as "UJ" based on potential low or indeterminate bias.

The LCS/LCSD WG1198987-3/4 exhibited a percent difference below the control limit for 2,2-dichloropropane (62%). The associated results for samples RMW01_011619 and RMW07_011619 are qualified as "UJ" based on potential indeterminate bias.

The LCS/LCSD WG119885-3/4 exhibited a percent difference below the control limit for bromomethane (32%/36%) and a RPD above the control limit for 1,4-dioxane (36% RPD). The associated results for sample RMW09_011619 are qualified as "UJ" based on potential low and indeterminate bias, respectively.

The initial calibration verification (ICV) for instrument ELAINE exhibited a percent difference above the control limit for dichlorodifluoromethane (-47.4%). The associated results for samples

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RMW01_011619 and RMW07_011619 are qualified as "UJ" based on potential indeterminate bias.

The CCV for instrument VOA122 on 1/17/19 at 7:21 exhibited a percent difference above the control limit for dichlorodifluoromethane (43.6%), chloromethane (46.2%), vinyl chloride (25.6%), bromomethane (57%), and 1,1-dichloroethene (21.6%). The associated results for samples GWFB02_011619 and GWTB03_011619 are qualified as "UJ" based on potential indeterminate bias. The associated chloromethane and bromomethane results were previously qualified based on LCS/LCSD recoveries.

The CCV for instrument ELAINE on 1/18/19 at 10:34 exhibited a percent difference for bromomethane (48.6%) and 2,2-dichloropropane (34.1%). The associated bromomethane results for samples RMW01_011619 and RMW07_011619 are qualified as "UJ" based on potential indeterminate bias. The 2,2-dichloropropane results were previously qualified based on the LCS/LCSD recoveries.

The CCV for instrument VOA122 on 1/21/18 at 8:17 exhibited a percent recovery above the control limit for 1,4-dioxane (34.6%) and hexachlorobutadiene (29.4%). The associated hexachlorobutadiene result for sample RMW09_011619 is qualified as "UJ" based on potential indeterminate bias. The 1,4-dioxane result was previously qualified based on the LCS/LCSD recoveries.

L1902340

The LCSD WG1199942-4 exhibited a percent recovery below the control limit for 1,2,4,5-tetramethylbenzene (60%). The associated results for samples RMW10_011719, RMW11_011719, RMW14_011719, RMW16_011719, RMW17_011719, and GWTB04_011719 are qualified as "J" or "UJ" based on potential low bias.

The CCV for instrument VOA108 on 1/22/2019 at 9:46 exhibited a percent difference above the control limit for 2,2-dichloropropane (27.2%). The associated results for samples RMW10_011719, RMW11_011719, RMW14_011719, RMW16_011719, RMW17_011719, and GWTB04_011719 are qualified as "UJ" based on potential indeterminate bias.

SVOCs by SW-846 Methods 8270D and 8270D SIM:

L1901689

The LCS/LCSD WG1197576-2/3 exhibited a percent recovery or RPD above the control limit for hexachlorocyclopentadiene (31% RPD), 1,2,4,5-tetrachlorobenzene (32% RPD), and 4-

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nitrophenol (86%/89% LCS/LCSD). The associated results for samples RMW18_011419 and RMW22_011419 are qualified as "UJ" based on potential indeterminate bias.

L1901865

The LCS/LCSD WG1198362-2/3 exhibited a percent difference above the control limit for 3,3'-dichlorobenzidine (49% RPD), 4-chloroaniline (41% RPD), and 2,4-dimethylphenol (29% LCS, 92% RPD). The associated results for samples RMW03_011519, RMW04_011519, RMW05_011519, and GWDUP01_011519 are qualified as "UJ" based on potential indeterminate bias.

The CCV for instrument SV107 on 1/18/19 at 9:48 exhibited a percent difference above the control limit for benzyl butyl phthalate (-20.2%). The associated results for samples RMW03_011519, RMW04_011519, RMW05_011519, and GWDUP01_011519 are qualified as "UJ" based on potential indeterminate bias.

The method blank WG1168363-1 exhibited a detection of pentachlorophenol (0.18 ug/l). The associated result for samples RMW03_011519, RMW05_011519, and GWDUP01_011519 are qualified as "U" at the reporting limit due to potential high bias.

L1902070

The LCS/LCSD WG1198691-2/3 exhibited a percent difference or RPD outside of the control limits for 4-chloroaniline (38% RPD) and 2,4-dimethylphenol (10%/29% LCS/LCSD; 97% RPD). The associated results for samples RMW01_011619, RMW07_011619, RMW09_011619, and GWFB02_011619 are qualified as "UJ" based on potential indeterminate bias.

The CCV for instrument SV107 on 1/19/19 at 7:24 exhibited a percent difference above the control limit for benzoic acid (-21.2%), 2,4,6-trichlorophenol (-21.5%), 2,4,5-trichlorophenol (-25.7%), dimethyl phthalate (-25.8%), and 2,6-dinitrotoluene (-27.4%). The associated results for samples RMW01_011619, RMW07_011619, RMW09_011619, and GWFB02_011619 are qualified as "UJ" based on potential indeterminate bias.

L1902340

The CCV for instrument SV119 on 1/22/19 at 9:35 exhibited a percent difference above the control limit for acenaphthylene (-20.9%). The associated results for samples RMW10_011719, RMW11_011719, RMW14_011719, RMW16_011719, and RMW17_011719 are qualified as "J" or "UJ" based on potential indeterminate bias.

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PFAS by EPA Method 537:

L1901689

The method blank WG1198461-1 exhibited a detection of 6:2FTS at a concentration of 1.28 ng/l. The associated detections for samples GWFB01_011419 and RMW22_011419 are qualified as "U" at the reporting limit due to potential high bias.

The field blank sample GWFB01_011419 exhibited a detection of 6:2FTS (1.05 ng/l) and perfluorooctanesulfonic acid (0.972 ng/l). The detections in the field blank sample are greater than 1/3 of the reporting limit, the associated perfluorooctanesulfonic acid result is qualified as "J" for sample RMW22_011419 due to potential high bias. The 6:2FTS result was previously qualified based on the method blank contamination.

L1902070

The method blank WG1198461-1 exhibited a detection of 6:2FTS at 1.28 ng/l. The associated results for samples RMW07_011619 and RMW09_011619 are qualified as "U" at the reporting limit and sample GWFB02_011619 is qualified as "J" due to potential high bias.

The field blank sample GWFB02_011619 exhibited a detection of 6:2FTS (2.08 ng/l), n-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) (0.428 ng/l), and n-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) (0.6950 ng/l). The associated NEtFOSAA result for sample RMW09_011619 is qualified as "U" at the reporting limit due to potential high bias. The additional results were non-detects or were previously qualified based on the method blank contamination.

Herbicides by SW-846 Method 8151A:

L1901689

The CCV for instrument PEST17 on 1/18/19 at 16:03 exhibited a percent difference above the control limit for 2,4,5-T (-26.8%). The associated results for samples RMW18_011419 and RMW22_011419 are qualified as "UJ" based on potential indeterminate bias.

L1901865

The CCV for instrument PEST17 on 1/19/19 at 13:19 exhibited a percent difference above the control limit for 2,4,5-T (-25.8%). The associated results for samples RMW03_011519 and RMW05_011519 are qualified as "UJ" based on potential indeterminate bias.

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Pesticides by SW-846 Method 8081B:

L1901865

The CCV for instrument PEST10 on 1/21/19 at 18:51 exhibited a percent difference above the control limit for toxaphene. The associated results for samples RMW03_011519, RMW05_011519, and GWDUP01_011519 are qualified as "UJ" based on potential indeterminate bias.

L1902340

The CCV for instrument PEST20 on 1/22/19 at 10:11 exhibited a percent difference above the control limit for toxaphene. The associated results for samples RMW10_011719, RMW11_011719, RMW14_011719, RMW16_011719, and RMW17_011719 are qualified as "UJ" based on potential indeterminate bias.

Metals by SW-846 Methods 6010D:

L1901689

The method blank sample WG1197826-1 exhibited a detection of dissolved antimony (0.00056 mg/l), dissolved iron (0.0443 mg/l), and dissolved manganese (0.00122 mg/l). The associated antimony results for samples RMW18_011419 and RMW22_011419 are qualified as "U" at the reporting limit due to potential high bias. The additional results were reported above the reporting limit and no qualification is necessary.

The method blank sample WG1197906-1 exhibited detections of antimony (0.00063 mg/l), chromium (0.00025 mg/l), and iron (0.0294 mg/l). The associated antimony results for samples RMW18_011419 and RMW22_011419 are qualified as "U" at the reporting limit due to potential high bias. The additional results were reported above the reporting limit and no qualification is necessary.

L1901865

The method blank WG1198261-1 exhibited a detection of dissolved chromium (0.0022 mg/l), dissolved iron (0.0328 mg/l), and dissolved sodium (0.0384 mg/l). The associated dissolved chromium results for samples RMW03_011519, RMW04_011519, and GWDUP01_011519 are qualified as "U" at the reporting limit due to potential high bias. The additional analytes were detected above the reporting limit in the associated samples; no qualification is necessary.

The method blank WG1198177-1 exhibited a detection of antimony (0.00045 mg/l), calcium (0.0394 mg/l), and sodium (0.0432 mg/l). The associated total antimony results for samples RMW03_011519, RMW04_011519, and RMW05_011519 are qualified as "U" at the reporting

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limit due to potential high bias. The additional analytes were detected above the reporting limit in the associated samples; no qualification is necessary.

The continuing calibration blank (CCB) R1150350-12 exhibited detections of dissolved antimony (0.872 ug/l), dissolved iron (19.5 ug/l), dissolved sodium (38.3 ug/l) and dissolved thallium (0.145 ug/l). The associated dissolved antimony results for samples RMW03_011519, RMW04_011519, RMW05_011519, and GWDUP01_011519 and the associated dissolved thallium results for samples RMW03_011519 and RMW04_011519 are qualified as "U" at the reporting limit due to potential high bias. The additional results were above the associated reporting limits and no qualification is necessary.

The CCB R1150350-12 exhibited detections of total antimony (0.872 ug/l), total iron (19.5 ug/l), total sodium (38.3 ug/l) and total thallium (0.145 ug/l). The associated total thallium result for sample RMW04_011519 is qualified as "U" at the reporting limit due to potential high bias. The additional results were above the associated reporting limits and no qualification is necessary.

L1902070

The method blank WG1198536-1 exhibited detections of dissolved antimony (0.00054 mg/l), dissolved chromium (0.00037 mg/l), dissolved iron (0.0411 mg/L), dissolved sodium (0.0323 mg/l) and dissolved thallium (0.00015 mg/l). The associated detections below the reporting limit for samples RMW01_011619, RMW07_011619, RMW09_011619, and GWFB02_011619 are qualified as "U" at the reporting limit for dissolved metals; antimony, chromium, iron, and thallium.

The method blank WG1198566-1 exhibited detections of total antimony (0.0052 mg/l) and total iron (0.0360 mg/l). The associated total antimony results for samples RMW01_011619, RMW07_011619, RMW09_011619 and the total thallium result for sample GWFB02_011619 are qualified as "U" at the reporting limit due to potential high bias.

L1902340

The method blank WG1198950-1 exhibited detections of total antimony (0.00048 mg/l) and total iron (0.0250 mg/l). The associated total antimony result for sample RMW16_011719 is qualified as "U" at the reporting limit due to potential high bias. The additional results were above the reporting limit for non-detects; no qualification is necessary.

The method blank WG1198915-1 exhibited detections of dissolved antimony (0.00059 mg/l), dissolved iron (0.0260 mg/l), and dissolved sodium (0.0319 mg/l). The associated dissolved antimony results for samples RMW10_011719, RMW11_011719, RMW14_011719, and

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RMW16_011719 are qualified as "U" at the reporting limit due to potential high bias. The additional results were above the reporting limit for non-detects; no qualification is necessary.

Mercury by SW-846 Method 7470A:

L1901865

The matrix spike/matrix spike duplicate (MS/MSD) WG1198576-3/4 exhibited a percent recovery and RPD outside of the control limits for dissolved mercury (56% MSD; 39% RPD). The associated results for the parent sample, RMW04_011519 qualified as "UJ" based on potential low bias.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1901689

The ICV for instrument VOA1222 exhibited a percent difference above the control limit for bromomethane (-30.4%). The associated results were previously qualified based on the LCS/LCSD percent recovery.

L1901865

The MS/MSD WG1198696-6/7 exhibited a percent recovery above the control limit for chloromethane (51%/48%), bromomethane (12%/12%), and trans-1,4-dichloro-2-butene (66%/58%); no qualification is necessary.

The ICV for instrument VOA122 exhibited a percent difference above the control limit for bromomethane (-30.4%). The associated results were previously qualified based on the LCS/LCSD recoveries.

L1902070

The ICV for instrument VOA122 exhibited a percent difference above the control limit for bromomethane (-30.4%). The associated results were previously qualified based on the LCS/LCSD percent recoveries.

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SVOCs by SW-846 Methods 8270D SIM:

L1901865

The MS/MSD WG1198362-4/5 exhibited a percent difference outside of the control limit for 3,3'-dichlorobenzidine (18%/19%); no qualification is necessary.

L1902070

The surrogate 2,4,6-tribromophenol was recovered above the control limit at 132% for sample RMW09_011619. The additional acid extractible surrogates were recovered within the appropriate range; no qualification is necessary.

Pesticides by SW-846 Method 8081B:

L1901865

The surrogates 2,4,5,6-tetrachloro-m-xylene and decachlorobiphenyl were not recovered (i.e. 0% recovery) for sample RMW05_011519. The sample was diluted by a factor of 50X; no qualification is necessary.

PFAS by EPA Method 537:

L1901689

The isotope dilution standard perfluoro(1,2-¹³C₂)tetradecanoic acid was recovered above the control limit at 155% for sample GWFB01. The associated target analyte result for sample GWFB01 is a non-detect; no qualification is necessary.

L1902070

The isotope dilution standard 1H,1H,2H,2H-perfluoro(1,2-¹³C₂)decanesulfonic acid (M2-8:FTS) was recovered above the control limit at 191% for sample RMW09_011619. The associated target analyte result for sample RMW09_011619 is a non-detect; no qualification is necessary.

Metals by SW-846 Methods 6010D:

L1901689

The MS WG1197826-1 (parent sample RMW18_011419) exhibited a percent recovery below the control limit for dissolved calcium (40%) and dissolved sodium (64%). The associated post digestion spike recoveries are within the acceptable ranges; no qualification is necessary.

The MS WG1197906-3 (parent sample RMW18_011419) exhibited a percent recovery below the control limit for total calcium (30%) and total iron (0%). The associated post digestion spike recoveries are within the acceptable range; no qualification is necessary.

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L1901865

The MS/MSD WG1198261-3/4 exhibited a percent recovery above the control limit for dissolved calcium (320%/510%), dissolved iron (141%/185%), dissolved magnesium (161%/182%), dissolved potassium (137% MSD), and dissolved sodium (310%/370%). The sample concentration is greater than 4X the spike concentration added for calcium, iron, magnesium, and sodium; no qualification is necessary.

The MS/MSD WG1198177-3/4 exhibited a percent recovery above the control limit for calcium (250%/310%), iron (151%/161%), magnesium (152%/168%), and sodium (290%/310%). Parent sample -02; sample concentration greater than 4x the spike for calcium, iron, magnesium, and sodium. Calcium (130%) and sodium (136%) out of range for post digestion spike; no qualification is necessary.

L1902070

The MS WG1198536-3 (-01) percent recovery outside of the control limits for dissolved metals calcium (240%), magnesium (134%), selenium (35%), and sodium (270%). The sample concentration was greater than 4X the spike concentration for calcium, magnesium, and sodium. The post digestion spike was within the acceptable range for selenium; no qualification is necessary.

The MS WG1198566-3 exhibited a percent recovery above the control limit for total metals; iron (130%), magnesium (200%), and sodium (130%). The associated parent sample is not a site specific sample; no qualification is necessary.

The laboratory duplicate WG1198566-4 and associated parent sample exhibited a RPD above the control limit for total nickel (26%). The parent sample is not a site specific sample; no qualification is necessary.

L1902340

The MS WG1198950-3 exhibited a percent recovery below the control limit for the total metals calcium (0%), magnesium (0%), and sodium (0%). The sample concentration was greater than 4X the spike concentration and the associated parent sample was not a site specific sample; no qualification is necessary.

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Mercury by SW-846 Method 7470A:

L1902070

The MS/MSD WG1198576-3/4 exhibited a percent recovery below the control limit (56% MSD) and an RPD above the control limit (39%). The associated parent sample was not a site specific sample; no qualification is necessary.

L1902340

The method blank WG1199430-1 exhibited a detection at a concentration of dissolved mercury 0.00008 mg/l. The associated results are non-detects; no qualifications are necessary

COMMENTS:

Field duplicate and parent sample pairs were collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 1X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 30% for groundwater. The following analytes did not meet the precision criteria:

- RMW03_011519 and GWDUP01_011519: 2-methylnaphthalene, benzo(a)pyrene, and total cyanide.

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 28, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Groundwater Samples Collected in September 2017
Langan Project No.: 170487003

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of groundwater samples collected in September 2017 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the Site") in Bronx, NY. The samples were analyzed by Alpha Analytical Laboratories of Westborough, MA (NYSDOH ELAP registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCB), and total and dissolved metals including mercury (Hg) by the analytical methods listed below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Methods 8270D and 8270C SIM
- PCBs by SW-846 Method 8082A
- Total and Dissolved Metals by SW-846 Method 6020A
- Total and Dissolved Hg by SW-846 Method 7470A

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

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TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1731603	L1731603-01	FB02_090717	9/7/2017	VOCs, SVOCs, Metals, Hg
L1731603	L1731603-06	MW01_090717	9/7/2017	VOCs, SVOCs, Metals, Hg
L1731603	L1731603-07	TB03_090717	9/7/2017	VOCs
L1731603	L1731603-08	MW01_090717 (LAB FILTER)	9/7/2017	VOCs, SVOCs, Metals, Hg
L1731771	L1731771-01	MW08_090817	9/8/2017	VOCs, SVOCs, Metals, Hg, PCBs
L1731771	L1731771-02	MW06_090817	9/8/2017	VOCs, SVOCs, Metals, Hg, PCBs
L1731771	L1731771-03	FB03_090817	9/8/2017	VOCs, SVOCs, Metals, Hg, PCBs
L1731771	L1731771-04	TB03_090817	9/8/2017	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-3b, "ICP-MS Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and Cyanide Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, serial dilutions, dual column performance, field duplicate, and trip blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

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- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION:

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
FB02_090717	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
FB02_090717	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
FB02_090717	8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
FB02_090717	8260C	123-91-1	1,4-DIOXANE	UJ
FB02_090717	8260C	591-78-6	2-HEXANONE	UJ
FB02_090717	8270D	88-75-5	2-NITROPHENOL	UJ
FB02_090717	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
FB02_090717	8270D	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	UJ
FB02_090717	8260C	74-83-9	BROMOMETHANE	UJ
FB02_090717	8260C	75-00-3	CHLOROETHANE	UJ
FB02_090717	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.001)
FB02_090717	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB02_090717	8260C	91-20-3	NAPHTHALENE	UJ
FB02_090717	8260C	127-18-4	TETRACHLOROETHENE	UJ
FB02_090717	8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
FB02_090717	8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
MW01_090717	8260C	630-20-6	1,1,1,2-TETRACHLOROETHANE	UJ
MW01_090717	8260C	71-55-6	1,1,1-TRICHLOROETHANE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
MW01_090717	8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
MW01_090717	8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
MW01_090717	8270D	88-75-5	2-NITROPHENOL	UJ
MW01_090717	8260C	67-64-1	ACETONE	UJ
MW01_090717	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
MW01_090717	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
MW01_090717	8260C	75-27-4	BROMODICHLOROMETHANE	UJ
MW01_090717	8260C	75-25-2	BROMOFORM	UJ
MW01_090717	8260C	74-83-9	BROMOMETHANE	UJ
MW01_090717	8260C	56-23-5	CARBON TETRACHLORIDE	UJ
MW01_090717	6020A	7440-50-8	COPPER, DISSOLVED	J
MW01_090717	8260C	87-68-3	HEXACHLOROBUTADIENE	UJ
MW01_090717	8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
MW01_090717	8260C	127-18-4	TETRACHLOROETHENE	J
MW01_090717	8260C	10061-02-6	TRANS-1,3-DICHLOROPROPENE	UJ
MW01_090717	8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
MW01_090717 (LAB FILTER)	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
TB03_090717	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
TB03_090717	8260C	123-91-1	1,4-DIOXANE	UJ
TB03_090717	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB03_090817	8260C	75-34-3	1,1-DICHLOROETHANE	UJ
FB03_090817	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
FB03_090817	8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
FB03_090817	8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
FB03_090817	8260C	123-91-1	1,4-DIOXANE	UJ
FB03_090817	6020A	7429-90-5	ALUMINUM, TOTAL	U (0.01)
FB03_090817	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
FB03_090817	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
FB03_090817	6020A	7440-39-3	BARIUM, TOTAL	U (0.003)
FB03_090817	8270DSIM	50-32-8	BENZO(A)PYRENE	UJ
FB03_090817	8270DSIM	205-99-2	BENZO(B)FLUORANTHENE	UJ
FB03_090817	8270D	65-85-0	BENZOIC ACID	UJ
FB03_090817	8260C	74-83-9	BROMOMETHANE	UJ
FB03_090817	6020A	7440-70-2	CALCIUM, DISSOLVED	J
FB03_090817	8260C	75-15-0	CARBON DISULFIDE	UJ
FB03_090817	8260C	74-87-3	CHLOROMETHANE	UJ
FB03_090817	6020A	7440-47-3	CHROMIUM, DISSOLVED	U (0.001)

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
FB03_090817	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.001)
FB03_090817	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB03_090817	8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
FB03_090817	8270DSIM	193-39-5	INDENO(1,2,3-CD)PYRENE	UJ
FB03_090817	8260C	91-20-3	NAPHTHALENE	UJ
FB03_090817	6020A	7440-02-0	NICKEL, TOTAL	U (0.002)
FB03_090817	8270DSIM	85-01-8	PHENANTHRENE	U (0.1)
FB03_090817	6020A	7440-23-5	SODIUM, TOTAL	UJ
FB03_090817	8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
FB03_090817	8260C	75-01-4	VINYL CHLORIDE	UJ
MW06_090817	8260C	79-34-5	1,1,2,2-TETRACHLOROETHANE	UJ
MW06_090817	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
MW06_090817	8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
MW06_090817	8260C	123-91-1	1,4-DIOXANE	UJ
MW06_090817	8260C	78-93-3	2-BUTANONE	UJ
MW06_090817	8260C	591-78-6	2-HEXANONE	UJ
MW06_090817	8270DSIM	83-32-9	ACENAPHTHENE	U (0.1)
MW06_090817	8260C	67-64-1	ACETONE	U (18)
MW06_090817	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
MW06_090817	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
MW06_090817	8270DSIM	50-32-8	BENZO(A)PYRENE	UJ
MW06_090817	8270DSIM	205-99-2	BENZO(B)FLUORANTHENE	J
MW06_090817	8270D	65-85-0	BENZOIC ACID	UJ
MW06_090817	6020A	7440-41-7	BERYLLIUM, TOTAL	U (0.00084)
MW06_090817	8260C	74-83-9	BROMOMETHANE	UJ
MW06_090817	6020A	7440-43-9	CADMIUM, TOTAL	U (0.0002)
MW06_090817	6020A	7440-70-2	CALCIUM, DISSOLVED	J
MW06_090817	6020A	7440-47-3	CHROMIUM, DISSOLVED	U (0.001)
MW06_090817	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
MW06_090817	8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
MW06_090817	8270DSIM	193-39-5	INDENO(1,2,3-CD)PYRENE	UJ
MW06_090817	8260C	91-20-3	NAPHTHALENE	J
MW06_090817	6020A	7440-02-0	NICKEL, DISSOLVED	U (0.013)
MW06_090817	8270DSIM	85-01-8	PHENANTHRENE	U (0.1)
MW06_090817	6020A	7440-23-5	SODIUM, TOTAL	J
MW08_090817	8260C	75-34-3	1,1-DICHLOROETHANE	UJ
MW08_090817	8260C	75-35-4	1,1-DICHLOROETHENE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
MW08_090817	8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
MW08_090817	8260C	87-61-6	1,2,3-TRICHLOROENZENE	UJ
MW08_090817	8260C	123-91-1	1,4-DIOXANE	UJ
MW08_090817	8270DSIM	83-32-9	ACENAPHTHENE	U (0.31)
MW08_090817	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
MW08_090817	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
MW08_090817	6020A	7440-38-2	ARSENIC, TOTAL	U (0.00099)
MW08_090817	6020A	7440-39-3	BARIUM, TOTAL	U (0.01548)
MW08_090817	8270D	65-85-0	BENZOIC ACID	UJ
MW08_090817	8260C	74-83-9	BROMOMETHANE	UJ
MW08_090817	6020A	7440-70-2	CALCIUM, DISSOLVED	J
MW08_090817	8260C	75-15-0	CARBON DISULFIDE	UJ
MW08_090817	8260C	74-87-3	CHLOROMETHANE	UJ
MW08_090817	6020A	7440-47-3	CHROMIUM, DISSOLVED	U (0.001)
MW08_090817	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.00496)
MW08_090817	6020A	7440-48-4	COBALT, TOTAL	U (0.001)
MW08_090817	6020A	7440-50-8	COPPER, DISSOLVED	U (0.0098)
MW08_090817	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
MW08_090817	8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
MW08_090817	6020A	7439-96-5	MANGANESE, TOTAL	J
MW08_090817	8270DSIM	91-20-3	NAPHTHALENE	U (0.24)
MW08_090817	8260C	91-20-3	NAPHTHALENE	UJ
MW08_090817	6020A	7440-02-0	NICKEL, DISSOLVED	U (0.002)
MW08_090817	6020A	7440-02-0	NICKEL, TOTAL	U (0.00467)
MW08_090817	8270DSIM	85-01-8	PHENANTHRENE	U (0.15)
MW08_090817	6020A	7440-23-5	SODIUM, TOTAL	J
MW08_090817	8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
MW08_090817	8260C	75-01-4	VINYL CHLORIDE	UJ
TB03_090817	8260C	75-34-3	1,1-DICHLOROETHANE	UJ
TB03_090817	8260C	75-35-4	1,1-DICHLOROETHENE	UJ
TB03_090817	8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
TB03_090817	8260C	87-61-6	1,2,3-TRICHLOROENZENE	UJ
TB03_090817	8260C	123-91-1	1,4-DIOXANE	UJ
TB03_090817	8260C	74-83-9	BROMOMETHANE	UJ
TB03_090817	8260C	75-15-0	CARBON DISULFIDE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
TB03_090817	8260C	74-87-3	CHLOROMETHANE	UJ
TB03_090817	8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
TB03_090817	8260C	91-20-3	NAPHTHALENE	UJ
TB03_090817	8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
TB03_090817	8260C	75-01-4	VINYL CHLORIDE	UJ

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731603:

The lab control sample and duplicate (LCS/LCSD) for batch WG1041014 exhibited percent recoveries below the lower control limit (LCL) for 1,1,1-trichloroethane (66%, 66%), 2,2-dichloropropane (57%, 57%), and carbon tetrachloride (60%, 57%). The associated results in sample MW01_090717 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1041384 exhibited a relative percent difference (RPD) above the control limit for 1,4-dioxane (22%). The associated results in sample TB03_090717 are qualified as "UJ" based on potential indeterminate bias.

The continuing calibration verification (CCV) analyzed on 9/12/2017 at 9:43 exhibited a percent difference (%D) above the control limit for dichlorodifluoromethane (33.5%), bromomethane (20.4%), chloroethane (26.3%), trichlorofluoromethane (23.2%), 1,1-dichloroethene (23%), trans-1,2-dichloroethene (20.8%), 1,4-dioxane (-28.1%), tetrachloroethene (21.3%), 2-hexanone (-22%), 1,2,3-trichloropropane (-20.1%), naphthalene (-34%), and 1,2,3-trichlorobenzene (-25.5%). The associated results in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 14:25 exhibited %D's above the control limit for bromomethane (24.4%), trichlorofluoromethane (28.9%), acetone (23.5%), methyl tert-butyl ether (21.8%), 2,2-dichloropropane (43.3%), carbon tetrachloride (40.2%), 1,1,1-trichloroethane

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(33.9%), bromodichloromethane (21%), tetrachloroethene (20.3%), trans-1,3-dichloropropene (26.5%), 1,1,1,2-tetrachloroethane (23%), bromoform (34%), 1,2-dibromo-3-chloropropane (34.6%), and hexachlorobutadiene (25.5%). The associated results in sample MW01_090717 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 8:18 exhibited %D's above the control limit for dichlorodifluoromethane (23.9%) and 1,1-dichloroethene (22.4%). The associated results in sample TB03_090717 are qualified as "UJ" based on potential indeterminate bias.

L1731771:

The trip blank (TB) (TB03_090817) exhibited a detection of acetone (2.5 ug/l). The associated results in sample MW06_090817 are qualified as "U" at the sample concentration based on potential blank contamination.

The LCS/LCSD for batch WG1041560 exhibited percent recoveries below the LCL for carbon disulfide (45%, 47%) and chloromethane (25%, 24%). The associated results in samples MW08_090817, FB03_090817, and TB03_090817 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1041740 exhibited RPD's above the control limit for naphthalene (49%) and 1,4-dioxane (24%). The associated results in sample MW06_090817 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 20:31 exhibited %D's above the control limit for dichlorodifluoromethane (48.3%), vinyl chloride (39%), bromomethane (45.3%), chloroethane (28.9%), 1,1-dichloroethene (31.4%), trans-1,2-dichloroethene (23.6%), 1,1-dichloroethane (23.1%), 1,1-dichloropropene (25.9%), 1,4-dioxane (-22.4%), and naphthalene (-27.2%), and 1,2,3-trichlorobenzene (-39.4%). The associated results in samples MW08_090817, FB03_090817, and TB03_090817 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/14/2017 at 7:15 exhibited %D's above the control limit for dichlorodifluoromethane (22.7%), bromomethane (54%), 1,1-dichloroethene (20.5%), 2-butanone (-20.5%), 2-hexanone (-22%), and 1,1,2,2-tetrachloroethane (-23.1%), and 1,2,3-trichloropropane (-25.1%). The associated results in sample MW06_090817 are qualified as "J" or "UJ" based on potential indeterminate bias.

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SVOCs by SW-846 Methods 8270D and 8270C SIM:

L1731603:

The CCV analyzed on 9/15/2017 at 7:39 exhibited a %D above the control limit for bis(2-ethylhexyl)phthalate (-20.7%). The associated results in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 9:23 exhibited a %D above the control limit for 2-nitrophenol (-23.4%). The associated results in samples FB02_090717 and MW01_090717 are qualified as "UJ" based on potential indeterminate bias.

L1731771:

The method blank (MB) for batch WG1040341 exhibited detections of acenaphthene (0.04 ug/l) and phenanthrene (0.06 ug/l). The associated results in samples MW08_090817 and MW06_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The field blank (FB) (FB03_090817) exhibited a detection of naphthalene (0.08 ug/l). The associated results in samples MW08_090817 and MW06_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The LCS for batch WG1040338 exhibited a percent recovery below the LCL for hexachlorocyclopentadiene (39%). The associated results in samples MW08_090817, MW06_090817, and FB03_090817 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1040338 exhibited a RPD above the control limit for benzoic acid (44%). The associated results in samples MW08_090817, MW06_090817, and FB03_090817 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/14/2017 at 7:34 exhibited %D's above the control limit for benzo(b)fluoranthene (-23.7%), and benzo(a)pyrene (-21.2%), and indeno(1,2,3-cd)pyrene (-22%). The associated results in samples MW06_090817 and FB03_090817 are qualified as "J" or "UJ" based on potential indeterminate bias.

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Metals by SW-846 Method 6020A:

L1731603:

The MB for batch WG1040748 exhibited a detection of antimony, total (0.00065 mg/l). The associated results in samples FB02_090717 and MW01_090717 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1040748 exhibited a detection of chromium, total (0.00068 mg/l). The associated results in sample FB02_090717 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1041736 exhibited a detection of antimony, dissolved (0.00052 mg/l). The associated results in sample MW01_090717 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1043235 exhibited a detection of antimony, dissolved (0.00135 mg/l). The associated results in sample MW01_090717 (filtered) are qualified as "U" at the reporting limit based on potential blank contamination.

The FB (FB02_090717) exhibited a detection of antimony, total (0.00049 mg/l). The associated results in sample MW01_090717 are qualified as "U" at the reporting limit based on potential blank contamination.

The matrix spike (MS) for batch WG1041736 exhibited a percent recovery above the upper control limit (UCL) for copper, dissolved (172%). The associated results in sample MW01_090717 are qualified as "J" based on potential high bias.

L1731771:

The MB for batch WG1041626 exhibited detections of antimony, dissolved (0.00137 mg/l) and chromium, dissolved (0.0006 mg/l). The associated results in samples MW08_090817, MW06_090817, and FB03_090817 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1041197 exhibited a detection of aluminum, total (0.00618 mg/l). The associated results in sample FB03_090817 are qualified as "U" at the reporting limit based on potential blank contamination.

The MB for batch WG1041197 exhibited a detection of antimony, total (0.00137 mg/l). The associated results in samples MW08_090817, MW06_090817, and FB03_090818 are qualified as "U" at the reporting limit based on potential blank contamination.

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The MB for batch WG1041197 exhibited detections of arsenic, total (0.00021 mg/l) and cobalt, total (0.00059 mg/l). The associated results in sample MW08_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The MB for batch WG1041197 exhibited detections of barium, total (0.00179 mg/l), and chromium, total (0.00087 mg/l), and nickel, total (0.00115 mg/l). The associated results in samples MW08_090817 and FB03_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The MB for batch WG1041197 exhibited detections of beryllium, total (0.0004 mg/l) and cadmium, total (0.00017 mg/l). The associated results in sample MW06_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The FB (FB03_090817) exhibited a detection of nickel, dissolved (0.00301 mg/l). The associated results in samples MW08_090817 and MW06_090817 are qualified as "U" at the higher of the sample concentration and the reporting limit based on potential blank contamination.

The FB (FB03_090817) exhibited a detection of copper, dissolved (0.00109 mg/l). The associated results in sample MW08_090817 are qualified as "U" at the sample concentration based on potential blank contamination.

The MS for batch WG1041197 exhibited a percent recovery below the LCL for sodium, total (51%). The associated results in samples MW08_090817, MW06_090817, and FB03_090817 are qualified as "J" or "UJ" based on potential low bias.

The serial dilution for sample MW08_090817 exhibited a %D above the control limit for manganese, total (22%). The associated result is qualified as "J" based on potential indeterminate bias.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731771:

The LCS/LCSD for batch WG1041560 exhibited a percent recovery above the UCL for 1,2,3-trichlorobenzene (140%, 140%). The associated results are non-detections. No qualification is necessary.

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SVOCs by SW-846 Methods 8270D and 8270C SIM:

L1731603:

The LCS/LCSD for batch WG1039521 exhibited a percent recovery above the UCL for p-chloro-m-cresol (100%, 113%). The associated results are non-detections. No qualification is necessary.

L1731771:

The FB (FB03_090817) exhibited detections of naphthalene (0.08 ug/l) and phenanthrene (0.02 ug/l). The associated results were previously qualified. No further action is necessary.

Metals by SW-846 Method 6020A:

L1731603:

The MB for batch WG1041736 exhibited a detection of chromium, dissolved (0.00045 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The TB (TB03_090717) exhibited a detection of acetone (1.8 ug/l). The associated results are non-detections. No qualification is necessary.

The FB (FB02_090717) exhibited detections of aluminum, total (0.0283 mg/l), barium, total (0.00153 mg/l), calcium, total (0.457 mg/l), chromium, total (0.00098 mg/l), copper, total (0.0005 mg/l), iron, total (0.0545 mg/l), lead, total (0.00131 mg/l), magnesium, total (0.0754 mg/l), manganese, total (0.00095 mg/l), nickel, total (0.00148 mg/l), potassium, total (0.102 mg/l), sodium, total (0.176 mg/l), and zinc, total (0.02017 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The MS for batch WG1041736 exhibited a percent recovery below the LCL for antimony, dissolved (37%). The associated results were previously qualified. No further action is necessary.

The MS for batch WG1041736 exhibited a percent recovery above the UCL for aluminum, dissolved (540%), iron, dissolved (700%), lead, dissolved (126%), magnesium, dissolved (193%), and manganese, dissolved (133%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS for batch WG1041736 exhibited a percent recovery below the LCL for calcium, dissolved (0%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS for batch WG1043235 exhibited a percent recovery below the LCL for calcium, dissolved (15%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

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L1731771:

The MB for batch WG1041197 exhibited detections of copper, total (0.00038 mg/l), and iron, total (0.0263 mg/l), and lead, total (0.00056 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The MB for batch WG1041197 exhibited a detection of thallium, total (0.00019 mg/l). The associated results are non-detections. No qualification is necessary.

The FB (FB03_090817) exhibited detections of antimony, dissolved (0.00079 mg/l) and chromium, dissolved (0.00062 mg/l). The associated results were previously qualified. No further action is necessary.

The FB (FB03_090817) exhibited detections of barium, dissolved (0.00017 mg/l), calcium, dissolved (0.0555 mg/l), and manganese, dissolved (0.00107 mg/l), and sodium, dissolved (0.246 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The FB (FB03_090817) exhibited detections of aluminum, total (0.00357 mg/l) and barium, total (0.0007 mg/l). The associated results are >10X the contamination. No qualification is necessary.

The FB (FB03_090817) exhibited detections of antimony, total (0.00086 mg/l), chromium, total (0.00078 mg/l), and nickel, total (0.0006 mg/l). The associated results were previously qualified. No further action is necessary.

Mercury by SW-846 Method 7470A:

L1731603:

The continuing calibration blank (R1004799-4) exhibited a detection of mercury, dissolved (0.000172 mg/l). The associated results are non-detections. No qualification is necessary.

COMMENTS:

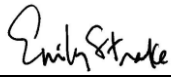
On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

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Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Tyler Goodnough, Langan Staff Scientist

From: Emily Strake, Langan Senior Project Chemist

Date: February 12, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Soil Samples Collected in December 2018 and January 2019
Langan Project No.: 170487001

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil samples collected in December 2018 and January 2019 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), herbicides, polychlorinated biphenyls (PCBs), pesticides, metals, mercury (Hg), toxicity characteristic leaching procedure (TCLP) for lead (Pb), cyanide (CN), and hexavalent chromium (CrVI), trivalent chromium (CrIII), and percent solids (%S) by the methods specified below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Method 8270D and 8270C-SIM
- Herbicides by SW-846 Method 8151A
- PCBs by SW-846 Method 8082A
- Pesticides by SW-846 Method 8081B
- Metals by SW-846 Method 6010D
- Mercury by SW-846 Method 7471B
- TCLP Extraction by EPA Method 1311
- Cyanide by SW-846 Method 9012B
- Hexavalent Chromium by SW-846 Method 7196A
- Trivalent Chromium (calculated)
- Percent Solids by Standard Method 2540G

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

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Data Usability Summary Report
 For Gerard & 146th Street
 Soil Samples Collected in December 2018 and January 2019
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TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1852610	L1852610-01	RB07_0-2	12/20/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852610	L1852610-02	RB07_8-10	12/20/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852610	L1852610-03	RB07_10-12	12/20/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-01	RB05_0-2	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-02	RB05_8-10	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-03	RB05_13-15	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-04	RB05_19-21	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-05	RB06_0-2	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1904428	L1904428-01	RB06_0-2	12/21/2018	TCLP Pb
L1852926	L1852926-06	RB06_8-10	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-07	RB06_10-12	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-08	RB04_0-2	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII
L1852926	L1852926-09	RB04_8-10	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1852926	L1852926-10	RB04_13-15	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-11	SODUP01_122118	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1852926	L1852926-12	SOTB01_122118	12/21/2018	VOCs
L1852926	L1852926-13	SOFB01_122118	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII
L1852926	L1852926-14	RB04_18-20	12/21/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853110	L1853110-01	RB03_17-18	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-01	RB03_0-2	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-02	RB03_2-3	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-03	RB03_10-12	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-04	RB12_0-2	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-05	RB12_8-9	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-06	RB12_9-10	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-07	RB12_10-12	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-08	RB02_0-2	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1853111	L1853111-09	RB02_7-9	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-10	RB02_10-12	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-11	RB02_13-15	12/26/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853111	L1853111-12	SOTB02_122618	12/26/2018	VOCs
L1853234	L1853234-01	RB01_0-2	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-02	RB01_14-15	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-03	RB01_25-27	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-04	RB08_0-2	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-05	RB08_10-12	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-06	RB08_12-14	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-07	RB08_14-16	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-08	SODUP02_122718	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-09	RB01_9-11	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1853234	L1853234-10	SOTB03_122718	12/27/2018	VOCs
L1853234	L1853234-11	SOFB02_122718	12/27/2018	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1900156	L1900156-01	RB09_0-2	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-02	RB09_19-21	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-03	RB09_28-30	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-04	RB11_0-2	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-05	RB11_19-21	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-06	RB11_28-30	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-07	SODUP03_010219	1/2/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900156	L1900156-08	SOTB04_010219	1/2/2019	VOCs
L1900324	L1900324-01	RB21_0-2	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1904428	L1904428-03	RB21_0-2	1/3/2019	TCLP Pb
L1900324	L1900324-02	RB21_2-4	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-03	RB21_18-20	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-04	RB22_0-2	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-05	RB22_3-5	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-06	RB19_0-2	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1900324	L1900324-07	RB19_20-22	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-08	RB19_24-25	1/3/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900324	L1900324-09	SOTB05_010319	1/3/2019	VOCs
L1900536	L1900536-01	RB17_0-2	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-02	RB17_4-6	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-03	RB17_8-10	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-04	RB17_18-20	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-05	RB18_0-2	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-06	RB18_6-8	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-07	RB18_15-17	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-08	RB18_18-20	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-09	RB20_0-2	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1904428	L1904428-02	RB20_13-15	1/4/2019	TCLP Pb
L1900536	L1900536-10	RB20_7-9	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-11	RB20_13-15	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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L1900536	L1900536-12	RB20_18-20	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-13	RB22_20-22	1/4/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900536	L1900536-14	SOTB06_010419	1/4/2019	VOCs
L1900707	L1900707-01	RB13_0-2	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-02	RB13_18-20	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-03	RB13_22-24	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-04	RB13_33-35	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-05	RB14_0-2	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-06	RB14_18-20	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-07	RB14_23-25	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-08	RB14_33-35	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-09	SODUP04_010719	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900707	L1900707-10	SOTB06_010719	1/7/2019	VOCs
L1900707	L1900707-11	SOFB03_010719	1/7/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII
L1900879	L1900879-01	RB10_0-2	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S

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<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1900879	L1900879-02	RB10_18-20	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-03	RB10_33-35	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-04	RB15_0-2	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-05	RB15_18-20	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-06	RB15_23-25	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-07	RB15_28-30	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-08	RB16_0-2	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-09	RB16_13-15	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-10	RB16_18-20	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-11	SODUP05_010819	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII, %S
L1900879	L1900879-12	SOFB04_010819	1/8/2019	VOCs, SVOCs, Herbicides, PCBs, Pesticides, Metals, Hg, CN, CrVI, CrIII
L1900879	L1900879-13	SOTB07_010819	1/8/2019	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016,

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Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-17, "Validating Chlorinated Herbicides" (December 2010, Revision 3.1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-36A, "Pesticide Data Validation" (October 2016, Revision 1), USEPA Region II SOP #HW-3a, "ICP-AES Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and Cyanide Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, sample extraction and digestion, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, serial dilutions, dual column performance, field duplicate, and field blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on

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the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RB13_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB13_0-2	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB13_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB13_0-2	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB13_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB13_0-2	6010D	7782-49-2	SELENIUM, TOTAL	U (1.78)
RB13_18-20	SW8081B	8001-35-2	TOXAPHENE	UJ
RB13_18-20	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB13_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB13_18-20	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB13_18-20	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB13_18-20	6010D	7782-49-2	SELENIUM, TOTAL	U (1.81)
RB13_22-24	SW8081B	8001-35-2	TOXAPHENE	UJ
RB13_22-24	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB13_22-24	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB13_22-24	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB13_22-24	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB13_22-24	6010D	7439-95-4	MAGNESIUM, TOTAL	J
RB13_22-24	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB13_22-24	6010D	7439-96-5	MANGANESE, TOTAL	J
RB13_22-24	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB13_33-35	SW8081B	8001-35-2	TOXAPHENE	UJ
RB13_33-35	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB13_33-35	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB13_33-35	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB13_33-35	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB13_33-35	6010D	7782-49-2	SELENIUM, TOTAL	U (1.7)

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RB14_0-2	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB14_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB14_0-2	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB14_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB14_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB14_0-2	6010D	7782-49-2	SELENIUM, TOTAL	U (1.83)
RB14_18-20	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB14_18-20	SW8081B	8001-35-2	TOXAPHENE	UJ
RB14_18-20	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB14_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB14_18-20	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB14_23-25	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
RB14_23-25	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB14_23-25	SW8260C	108-67-8	1,3,5-TRIMETHYLBENZENE	J
RB14_23-25	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
RB14_23-25	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB14_23-25	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
RB14_23-25	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB14_23-25	6010D	7439-96-5	MANGANESE, TOTAL	J
RB14_23-25	SW8270D	111-91-1	BIS(2-CHLOROETHOXY)METHANE	UJ
RB14_23-25	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB14_23-25	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB14_23-25	SW8270D	91-20-3	NAPHTHALENE	J
RB14_23-25	SW8081B	8001-35-2	TOXAPHENE	UJ
RB14_23-25	SW8260C	100-41-4	ETHYLBENZENE	J
RB14_23-25	SW8260C	98-82-8	ISOPROPYLBENZENE	J
RB14_23-25	SW8260C	91-20-3	NAPHTHALENE	J
RB14_23-25	SW8260C	104-51-8	N-BUTYLBENZENE	J
RB14_23-25	SW8260C	103-65-1	N-PROPYLBENZENE	J
RB14_23-25	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	J
RB14_23-25	SW8260C	135-98-8	SEC-BUTYLBENZENE	J

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RB14_33-35	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
RB14_33-35	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB14_33-35	SW8081B	8001-35-2	TOXAPHENE	UJ
RB14_33-35	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB14_33-35	SW8270D	100-01-6	4-NITROANILINE	UJ
RB14_33-35	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP04_010719	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
SODUP04_010719	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
SODUP04_010719	SW8260C	108-67-8	1,3,5-TRIMETHYLBENZENE	J
SODUP04_010719	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
SODUP04_010719	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SODUP04_010719	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
SODUP04_010719	SW8270D	106-47-8	4-CHLOROANILINE	UJ
SODUP04_010719	SW8270D	100-01-6	4-NITROANILINE	UJ
SODUP04_010719	6010D	7439-96-5	MANGANESE, TOTAL	J
SODUP04_010719	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP04_010719	SW8270D	91-20-3	NAPHTHALENE	J
SODUP04_010719	SW8081B	8001-35-2	TOXAPHENE	UJ
SODUP04_010719	SW8260C	100-41-4	ETHYLBENZENE	J
SODUP04_010719	SW8260C	98-82-8	ISOPROPYLBENZENE	J
SODUP04_010719	SW8260C	91-20-3	NAPHTHALENE	J
SODUP04_010719	SW8260C	104-51-8	N-BUTYLBENZENE	J
SODUP04_010719	SW8260C	103-65-1	N-PROPYLBENZENE	J
SODUP04_010719	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	J
SODUP04_010719	SW8260C	135-98-8	SEC-BUTYLBENZENE	J
SOFB03_010719	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
SOFB03_010719	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOFB03_010719	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOFB03_010719	SW8260C	78-93-3	2-BUTANONE	UJ
SOFB03_010719	SW8260C	591-78-6	2-HEXANONE	UJ
SOFB03_010719	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOFB03_010719	SW8260C	67-64-1	ACETONE	UJ

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SOFB03_010719	SW8260C	74-83-9	BROMOMETHANE	UJ
SOFB03_010719	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOFB03_010719	SW8260C	91-20-3	NAPHTHALENE	UJ
SOFB03_010719	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SOFB03_010719	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SOFB03_010719	SW8270DSI M	87-86-5	PENTACHLOROPHENOL	UJ
SOTB06_010719	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
SOTB06_010719	SW8260C	96-12-8	1,2-DIBROMO-3- CHLOROPROPANE	UJ
SOTB06_010719	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB06_010719	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB06_010719	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB06_010719	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB06_010719	SW8260C	67-64-1	ACETONE	UJ
SOTB06_010719	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB06_010719	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOTB06_010719	SW8260C	91-20-3	NAPHTHALENE	UJ
SOTB06_010719	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB17_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB17_0-2	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB17_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB17_0-2	6010D	7440-39-3	BARIUM, TOTAL	J
RB17_0-2	SW8270D	108-60-1	BIS(2- CHLOROISOPROPYL)ETHER	UJ
RB17_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB17_0-2	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB17_0-2	6010D	7440-43-9	CADMIUM, TOTAL	J
RB17_0-2	6010D	7440-70-2	CALCIUM, TOTAL	J
RB17_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB17_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB17_0-2	6010D	7440-50-8	COPPER, TOTAL	J
RB17_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ

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RB17_0-2	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ
RB17_0-2	6010D	7439-89-6	IRON, TOTAL	J
RB17_0-2	6010D	7439-95-4	MAGNESIUM, TOTAL	J
RB17_0-2	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB17_0-2	6010D	7440-02-0	NICKEL, TOTAL	J
RB17_0-2	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB17_0-2	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB17_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB17_0-2	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB17_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB17_18-20	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB17_18-20	6010D	7440-38-2	ARSENIC, TOTAL	J
RB17_18-20	6010D	7440-39-3	BARIUM, TOTAL	J
RB17_18-20	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB17_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB17_18-20	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB17_18-20	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB17_18-20	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB17_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB17_18-20	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ
RB17_18-20	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB17_18-20	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB17_18-20	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB17_18-20	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB17_4-6	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB17_4-6	SW8081B	72-54-8	4,4'-DDD	UJ
RB17_4-6	SW8081B	72-55-9	4,4'-DDE	UJ
RB17_4-6	SW8081B	50-29-3	4,4'-DDT	UJ
RB17_4-6	SW8081B	309-00-2	ALDRIN	UJ
RB17_4-6	SW8081B	319-84-6	ALPHA-BHC	UJ
RB17_4-6	6010D	7440-38-2	ARSENIC, TOTAL	J
RB17_4-6	6010D	7440-39-3	BARIUM, TOTAL	J

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RB17_4-6	SW8081B	319-85-7	BETA-BHC	UJ
RB17_4-6	SW8260C	74-83-9	BROMOMETHANE	UJ
RB17_4-6	SW8081B	57-74-9	CHLORDANE	UJ
RB17_4-6	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB17_4-6	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB17_4-6	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB17_4-6	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB17_4-6	SW8081B	319-86-8	DELTA-BHC	UJ
RB17_4-6	SW8081B	60-57-1	DIELDRIN	UJ
RB17_4-6	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB17_4-6	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB17_4-6	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB17_4-6	SW8081B	72-20-8	ENDRIN	UJ
RB17_4-6	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB17_4-6	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB17_4-6	SW8081B	76-44-8	HEPTACHLOR	UJ
RB17_4-6	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB17_4-6	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB17_4-6	SW8081B	58-89-9	LINDANE	UJ
RB17_4-6	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB17_4-6	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB17_4-6	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB17_4-6	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB17_4-6	SW8081B	8001-35-2	TOXAPHENE	UJ
RB17_4-6	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB17_8-10	6010D	7440-38-2	ARSENIC, TOTAL	J
RB17_8-10	6010D	7440-39-3	BARIUM, TOTAL	J
RB17_8-10	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB17_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB17_8-10	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB17_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ

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RB18_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB18_0-2	6010D	7440-39-3	BARIUM, TOTAL	J
RB18_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB18_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB18_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB18_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB18_15-17	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB18_15-17	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB18_15-17	6010D	7440-38-2	ARSENIC, TOTAL	UJ
RB18_15-17	6010D	7440-39-3	BARIUM, TOTAL	J
RB18_15-17	SW8270D	108-60-1	BIS(2- CHLOROISOPROPYL)ETHER	UJ
RB18_15-17	SW8260C	74-83-9	BROMOMETHANE	UJ
RB18_15-17	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB18_15-17	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB18_15-17	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB18_15-17	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB18_15-17	SW8270D	117-84-0	DI-N-OCTYLPHTHALATE	UJ
RB18_15-17	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB18_15-17	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB18_15-17	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB18_15-17	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB18_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB18_18-20	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB18_18-20	6010D	7440-38-2	ARSENIC, TOTAL	UJ
RB18_18-20	6010D	7440-39-3	BARIUM, TOTAL	J
RB18_18-20	SW8270D	108-60-1	BIS(2- CHLOROISOPROPYL)ETHER	UJ
RB18_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB18_18-20	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB18_18-20	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB18_18-20	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB18_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ

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RB18_18-20	SW8270D	117-84-0	DI-N-OCTYLPHTHALATE	UJ
RB18_18-20	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB18_18-20	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB18_18-20	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB18_18-20	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB18_6-8	6010D	7440-38-2	ARSENIC, TOTAL	J
RB18_6-8	6010D	7440-39-3	BARIUM, TOTAL	J
RB18_6-8	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB18_6-8	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB18_6-8	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB20_0-2	6010D	7440-39-3	BARIUM, TOTAL	J
RB20_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB20_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB20_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB20_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB20_0-2	SW8260C	67-64-1	ACETONE	J
RB20_0-2	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB20_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB20_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB20_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_13-15	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB20_13-15	6010D	7440-38-2	ARSENIC, TOTAL	J
RB20_13-15	6010D	7440-39-3	BARIUM, TOTAL	J
RB20_13-15	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB20_13-15	SW8260C	74-83-9	BROMOMETHANE	UJ
RB20_13-15	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB20_13-15	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB20_13-15	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB20_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	J

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RB20_13-15	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ
RB20_13-15	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB20_13-15	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB20_13-15	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB20_13-15	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB20_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_18-20	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB20_18-20	6010D	7440-38-2	ARSENIC, TOTAL	J
RB20_18-20	6010D	7440-39-3	BARIUM, TOTAL	J
RB20_18-20	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB20_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB20_18-20	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB20_18-20	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB20_18-20	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB20_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB20_18-20	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ
RB20_18-20	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB20_18-20	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB20_18-20	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB20_18-20	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB20_7-9	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB20_7-9	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB20_7-9	6010D	7440-38-2	ARSENIC, TOTAL	J
RB20_7-9	6010D	7440-39-3	BARIUM, TOTAL	J
RB20_7-9	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB20_7-9	SW8260C	74-83-9	BROMOMETHANE	UJ
RB20_7-9	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB20_7-9	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB20_7-9	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB20_7-9	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB20_7-9	SW8270D	117-84-0	DI-N-OCTYLPHthalate	UJ

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RB20_7-9	SW8260C	104-51-8	N-BUTYLBENZENE	UJ
RB20_7-9	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB20_7-9	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	UJ
RB20_7-9	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
RB22_20-22	6010D	7440-38-2	ARSENIC, TOTAL	J
RB22_20-22	6010D	7440-39-3	BARIUM, TOTAL	J
RB22_20-22	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB22_20-22	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB22_20-22	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB22_20-22	SW8260C	591-78-6	2-HEXANONE	UJ
RB22_20-22	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB22_20-22	SW8260C	67-64-1	ACETONE	UJ
RB22_20-22	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB22_20-22	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB22_20-22	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB22_20-22	SW8270D	117-84-0	DI-N-OCTYLPHTHALATE	UJ
RB22_20-22	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB22_20-22	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB22_20-22	SW8260C	75-01-4	VINYL CHLORIDE	UJ
SOTB06_010419	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
SOTB06_010419	SW8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
SOTB06_010419	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOTB06_010419	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB06_010419	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB06_010419	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB06_010419	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB06_010419	SW8260C	67-64-1	ACETONE	UJ
SOTB06_010419	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB06_010419	SW8260C	91-20-3	NAPHTHALENE	UJ
RB19_0-2	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB19_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J

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RB19_0-2	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB19_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB19_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB19_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB19_0-2	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB19_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB19_0-2	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB19_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB19_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB19_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB19_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB19_0-2	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB19_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB19_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB19_20-22	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB19_20-22	6010D	7440-38-2	ARSENIC, TOTAL	J
RB19_20-22	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB19_20-22	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB19_20-22	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB19_20-22	SW8081B	8001-35-2	TOXAPHENE	UJ
RB19_20-22	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB19_20-22	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB19_24-25	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB19_24-25	6010D	7440-38-2	ARSENIC, TOTAL	J
RB19_24-25	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB19_24-25	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB19_24-25	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB19_24-25	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB19_24-25	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB19_24-25	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB19_24-25	SW8260C	74-83-9	BROMOMETHANE	UJ
RB19_24-25	SW7471B	7439-97-6	MERCURY, TOTAL	J

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RB19_24-25	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB19_24-25	SW8081B	8001-35-2	TOXAPHENE	UJ
RB19_24-25	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB19_24-25	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB19_24-25	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB19_24-25	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB21_0-2	6010D	7440-36-0	ANTIMONY, TOTAL	J
RB21_0-2	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB21_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB21_0-2	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB21_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB21_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
RB21_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB21_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB21_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB21_0-2	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB21_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB21_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB21_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB21_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB21_0-2	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB21_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB21_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB21_18-20	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB21_18-20	6010D	7440-38-2	ARSENIC, TOTAL	J
RB21_18-20	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB21_18-20	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB21_18-20	SW7471B	7439-97-6	MERCURY, TOTAL	UJ
RB21_18-20	SW8081B	33213-65-9	ENDOSULFAN II	J
RB21_18-20	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB21_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB21_18-20	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ

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RB21_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB21_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB21_18-20	SW8081B	8001-35-2	TOXAPHENE	UJ
RB21_18-20	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB21_18-20	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB21_18-20	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB21_18-20	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB21_18-20	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB21_2-4	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB21_2-4	6010D	7440-38-2	ARSENIC, TOTAL	J
RB21_2-4	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB21_2-4	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB21_2-4	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB21_2-4	SW8270D	88-75-5	2-NITROPHENOL	UJ
RB21_2-4	SW8270D	534-52-1	4,6-DINITRO-O-CRESOL	UJ
RB21_2-4	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB21_2-4	SW8270D	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	UJ
RB21_2-4	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB21_2-4	SW8270D	84-74-2	DI-N-BUTYLPHTHALATE	UJ
RB21_2-4	SW8270D	117-84-0	DI-N-OCTYLPHTHALATE	UJ
RB21_2-4	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB21_2-4	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB21_2-4	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB21_2-4	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB21_2-4	SW8260C	74-83-9	BROMOMETHANE	UJ
RB21_2-4	SW8081B	8001-35-2	TOXAPHENE	UJ
RB21_2-4	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB21_2-4	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB21_2-4	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB21_2-4	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB21_2-4	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB22_0-2	6010D	7440-36-0	ANTIMONY, TOTAL	UJ

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RB22_0-2	6010D	7440-38-2	ARSENIC, TOTAL	J
RB22_0-2	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB22_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB22_0-2	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB22_0-2	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB22_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB22_0-2	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB22_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB22_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB22_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB22_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB22_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB22_0-2	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB22_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB22_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB22_3-5	6010D	7440-36-0	ANTIMONY, TOTAL	UJ
RB22_3-5	6010D	7440-38-2	ARSENIC, TOTAL	J
RB22_3-5	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
RB22_3-5	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB22_3-5	SW8081B	72-55-9	4,4'-DDE	J
RB22_3-5	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB22_3-5	6010D	7440-47-3	CHROMIUM, TOTAL	J
RB22_3-5	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB22_3-5	SW8260C	622-96-8	4-ETHYLTOLUENE	UJ
RB22_3-5	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB22_3-5	SW8260C	74-83-9	BROMOMETHANE	U (2.1)
RB22_3-5	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB22_3-5	SW8081B	8001-35-2	TOXAPHENE	UJ
RB22_3-5	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB22_3-5	6010D	7440-28-0	THALLIUM, TOTAL	UJ
RB22_3-5	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB22_3-5	SW8260C	75-01-4	VINYL CHLORIDE	UJ

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SOTB05_010319	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOTB05_010319	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB05_010319	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB05_010319	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB05_010319	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB05_010319	SW8260C	67-64-1	ACETONE	UJ
SOTB05_010319	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB05_010319	SW8260C	108-05-4	VINYL ACETATE	UJ
RB09_0-2	SW8081B	72-54-8	4,4'-DDD	UJ
RB09_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB09_0-2	SW8081B	72-55-9	4,4'-DDE	UJ
RB09_0-2	SW8081B	50-29-3	4,4'-DDT	UJ
RB09_0-2	SW8081B	309-00-2	ALDRIN	UJ
RB09_0-2	SW8081B	319-84-6	ALPHA-BHC	UJ
RB09_0-2	SW8081B	319-85-7	BETA-BHC	UJ
RB09_0-2	SW8081B	57-74-9	CHLORDANE	UJ
RB09_0-2	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB09_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB09_0-2	SW8081B	319-86-8	DELTA-BHC	UJ
RB09_0-2	SW8081B	60-57-1	DIELDRIN	UJ
RB09_0-2	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB09_0-2	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB09_0-2	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB09_0-2	SW8081B	72-20-8	ENDRIN	UJ
RB09_0-2	6010D	7782-49-2	SELENIUM, TOTAL	U (1.64)
RB09_0-2	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB09_0-2	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB09_0-2	SW8081B	76-44-8	HEPTACHLOR	UJ
RB09_0-2	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB09_0-2	SW8081B	58-89-9	LINDANE	UJ
RB09_0-2	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB09_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ

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RB09_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB09_19-21	6010D	7440-39-3	BARIUM, TOTAL	J
RB09_19-21	SW8081B	72-54-8	4,4'-DDD	UJ
RB09_19-21	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
RB09_19-21	SW8081B	72-55-9	4,4'-DDE	UJ
RB09_19-21	6010D	7439-92-1	LEAD, TOTAL	J
RB09_19-21	SW8081B	50-29-3	4,4'-DDT	UJ
RB09_19-21	SW8081B	309-00-2	ALDRIN	UJ
RB09_19-21	SW8081B	319-84-6	ALPHA-BHC	UJ
RB09_19-21	SW8081B	319-85-7	BETA-BHC	UJ
RB09_19-21	SW8081B	57-74-9	CHLORDANE	UJ
RB09_19-21	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
RB09_19-21	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB09_19-21	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB09_19-21	SW8081B	319-86-8	DELTA-BHC	UJ
RB09_19-21	SW8260C	71-43-2	BENZENE	J
RB09_19-21	6010D	7782-49-2	SELENIUM, TOTAL	U (1.83)
RB09_19-21	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB09_19-21	SW8081B	60-57-1	DIELDRIN	UJ
RB09_19-21	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB09_19-21	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB09_19-21	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB09_19-21	SW8081B	72-20-8	ENDRIN	UJ
RB09_19-21	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
RB09_19-21	SW8270D	206-44-0	FLUORANTHENE	J
RB09_19-21	SW8270D	91-20-3	NAPHTHALENE	J
RB09_19-21	SW8270D	85-01-8	PHENANTHRENE	J
RB09_19-21	SW8270D	129-00-0	PYRENE	J
RB09_19-21	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB09_19-21	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB09_19-21	SW8081B	76-44-8	HEPTACHLOR	UJ
RB09_19-21	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ

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RB09_19-21	SW8081B	58-89-9	LINDANE	UJ
RB09_19-21	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB09_19-21	SW8081B	8001-35-2	TOXAPHENE	UJ
RB09_19-21	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB09_19-21	SW8260C	98-82-8	ISOPROPYLBENZENE	J
RB09_19-21	SW8260C	104-51-8	N-BUTYLBENZENE	J
RB09_19-21	SW8260C	103-65-1	N-PROPYLBENZENE	J
RB09_19-21	SW8260C	135-98-8	SEC-BUTYLBENZENE	J
RB09_28-30	SW8081B	72-54-8	4,4'-DDD	UJ
RB09_28-30	SW8081B	72-55-9	4,4'-DDE	UJ
RB09_28-30	SW8081B	50-29-3	4,4'-DDT	UJ
RB09_28-30	SW8081B	309-00-2	ALDRIN	UJ
RB09_28-30	SW8081B	319-84-6	ALPHA-BHC	UJ
RB09_28-30	SW8081B	319-85-7	BETA-BHC	UJ
RB09_28-30	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB09_28-30	SW8081B	57-74-9	CHLORDANE	UJ
RB09_28-30	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB09_28-30	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB09_28-30	SW8081B	319-86-8	DELTA-BHC	UJ
RB09_28-30	SW8081B	60-57-1	DIELDRIN	UJ
RB09_28-30	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB09_28-30	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB09_28-30	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB09_28-30	SW8081B	72-20-8	ENDRIN	UJ
RB09_28-30	6010D	7782-49-2	SELENIUM, TOTAL	U (1.89)
RB09_28-30	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB09_28-30	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB09_28-30	SW8081B	76-44-8	HEPTACHLOR	UJ
RB09_28-30	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB09_28-30	SW8081B	58-89-9	LINDANE	UJ
RB09_28-30	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB09_28-30	SW8081B	8001-35-2	TOXAPHENE	UJ

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RB09_28-30	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB11_0-2	SW8081B	72-54-8	4,4'-DDD	J
RB11_0-2	SW8081B	72-55-9	4,4'-DDE	UJ
RB11_0-2	SW8081B	50-29-3	4,4'-DDT	J
RB11_0-2	SW8081B	309-00-2	ALDRIN	UJ
RB11_0-2	SW8081B	319-84-6	ALPHA-BHC	UJ
RB11_0-2	SW8081B	319-85-7	BETA-BHC	UJ
RB11_0-2	SW8081B	57-74-9	CHLORDANE	UJ
RB11_0-2	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB11_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB11_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB11_0-2	SW8081B	319-86-8	DELTA-BHC	UJ
RB11_0-2	SW8081B	60-57-1	DIELDRIN	J
RB11_0-2	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB11_0-2	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB11_0-2	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB11_0-2	SW8081B	72-20-8	ENDRIN	UJ
RB11_0-2	6010D	7782-49-2	SELENIUM, TOTAL	U (1.69)
RB11_0-2	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB11_0-2	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB11_0-2	SW8081B	76-44-8	HEPTACHLOR	UJ
RB11_0-2	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB11_0-2	SW8081B	58-89-9	LINDANE	UJ
RB11_0-2	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB11_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB11_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB11_19-21	SW8081B	72-54-8	4,4'-DDD	UJ
RB11_19-21	SW8081B	72-55-9	4,4'-DDE	UJ
RB11_19-21	SW8081B	50-29-3	4,4'-DDT	UJ
RB11_19-21	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB11_19-21	SW8081B	309-00-2	ALDRIN	UJ
RB11_19-21	SW8081B	319-84-6	ALPHA-BHC	UJ

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RB11_19-21	SW8081B	319-85-7	BETA-BHC	UJ
RB11_19-21	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB11_19-21	SW8081B	57-74-9	CHLORDANE	UJ
RB11_19-21	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB11_19-21	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB11_19-21	SW8081B	319-86-8	DELTA-BHC	UJ
RB11_19-21	SW8081B	60-57-1	DIELDRIN	UJ
RB11_19-21	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB11_19-21	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB11_19-21	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB11_19-21	SW8081B	72-20-8	ENDRIN	UJ
RB11_19-21	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB11_19-21	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB11_19-21	SW8081B	76-44-8	HEPTACHLOR	UJ
RB11_19-21	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB11_19-21	SW8081B	58-89-9	LINDANE	UJ
RB11_19-21	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB11_19-21	6010D	7782-49-2	SELENIUM, TOTAL	U (1.84)
RB11_19-21	SW8081B	8001-35-2	TOXAPHENE	UJ
RB11_19-21	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
RB11_28-30	SW8081B	72-54-8	4,4'-DDD	UJ
RB11_28-30	SW8081B	72-55-9	4,4'-DDE	UJ
RB11_28-30	SW8081B	50-29-3	4,4'-DDT	UJ
RB11_28-30	SW8081B	309-00-2	ALDRIN	UJ
RB11_28-30	SW8081B	319-84-6	ALPHA-BHC	UJ
RB11_28-30	SW8081B	319-85-7	BETA-BHC	UJ
RB11_28-30	SW8081B	57-74-9	CHLORDANE	UJ
RB11_28-30	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB11_28-30	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
RB11_28-30	SW8081B	319-86-8	DELTA-BHC	UJ
RB11_28-30	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB11_28-30	SW8081B	60-57-1	DIELDRIN	UJ

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RB11_28-30	SW8081B	959-98-8	ENDOSULFAN I	UJ
RB11_28-30	SW8081B	33213-65-9	ENDOSULFAN II	UJ
RB11_28-30	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB11_28-30	SW8081B	72-20-8	ENDRIN	UJ
RB11_28-30	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
RB11_28-30	SW8081B	53494-70-5	ENDRIN KETONE	UJ
RB11_28-30	SW8081B	76-44-8	HEPTACHLOR	UJ
RB11_28-30	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
RB11_28-30	SW8081B	58-89-9	LINDANE	UJ
RB11_28-30	SW8081B	72-43-5	METHOXYCHLOR	UJ
RB11_28-30	SW8081B	8001-35-2	TOXAPHENE	UJ
RB11_28-30	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
SODUP03_010219	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
SODUP03_010219	SW8151A	93-76-5	2,4,5-T	UJ
SODUP03_010219	SW8151A	93-72-1	2,4,5-TP (SILVEX)	UJ
SODUP03_010219	SW8151A	94-75-7	2,4-D	UJ
SODUP03_010219	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
SODUP03_010219	SW8081B	72-54-8	4,4'-DDD	UJ
SODUP03_010219	SW8081B	72-55-9	4,4'-DDE	UJ
SODUP03_010219	SW8081B	50-29-3	4,4'-DDT	UJ
SODUP03_010219	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
SODUP03_010219	SW8260C	123-91-1	1,4-DIOXANE	UJ
SODUP03_010219	SW8081B	309-00-2	ALDRIN	UJ
SODUP03_010219	SW8081B	319-84-6	ALPHA-BHC	UJ
SODUP03_010219	6010D	7440-39-3	BARIUM, TOTAL	J
SODUP03_010219	SW8081B	319-85-7	BETA-BHC	UJ
SODUP03_010219	SW8270D	92-52-4	BIPHENYL	J
SODUP03_010219	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
SODUP03_010219	SW8081B	57-74-9	CHLORDANE	UJ
SODUP03_010219	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
SODUP03_010219	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP03_010219	SW8081B	319-86-8	DELTA-BHC	UJ

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SODUP03_010219	SW8081B	60-57-1	DIELDRIN	UJ
SODUP03_010219	SW8081B	959-98-8	ENDOSULFAN I	UJ
SODUP03_010219	SW8081B	33213-65-9	ENDOSULFAN II	UJ
SODUP03_010219	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
SODUP03_010219	SW8081B	72-20-8	ENDRIN	UJ
SODUP03_010219	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
SODUP03_010219	SW8081B	53494-70-5	ENDRIN KETONE	UJ
SODUP03_010219	SW8270D	206-44-0	FLUORANTHENE	J
SODUP03_010219	SW8081B	76-44-8	HEPTACHLOR	UJ
SODUP03_010219	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
SODUP03_010219	SW8260C	71-43-2	BENZENE	J
SODUP03_010219	6010D	7439-92-1	LEAD, TOTAL	J
SODUP03_010219	SW8081B	58-89-9	LINDANE	UJ
SODUP03_010219	SW8081B	72-43-5	METHOXYCHLOR	UJ
SODUP03_010219	SW8270D	91-20-3	NAPHTHALENE	J
SODUP03_010219	SW8270D	85-01-8	PHENANTHRENE	J
SODUP03_010219	SW8270D	129-00-0	PYRENE	J
SODUP03_010219	6010D	7782-49-2	SELENIUM, TOTAL	U (1.86)
SODUP03_010219	SW8081B	8001-35-2	TOXAPHENE	UJ
SODUP03_010219	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
SODUP03_010219	SW8260C	98-82-8	ISOPROPYLBENZENE	J
SODUP03_010219	SW8260C	104-51-8	N-BUTYLBENZENE	J
SODUP03_010219	SW8260C	103-65-1	N-PROPYLBENZENE	J
SODUP03_010219	SW8260C	135-98-8	SEC-BUTYLBENZENE	J
SOTB04_010219	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB04_010219	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB04_010219	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SOTB04_010219	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB04_010219	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB04_010219	SW8260C	67-64-1	ACETONE	J
SOTB04_010219	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOTB04_010219	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ

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SOTB04_010219	SW8260C	108-05-4	VINYL ACETATE	UJ
RB01_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB01_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB01_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB01_0-2	6010D	7440-70-2	CALCIUM, TOTAL	J
RB01_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB01_0-2	6010D	7440-50-8	COPPER, TOTAL	J
RB01_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB01_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
RB01_0-2	6010D	7439-92-1	LEAD, TOTAL	J
RB01_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB01_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB01_0-2	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB01_0-2	6010D	7440-66-6	ZINC, TOTAL	J
RB01_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB01_0-2	SW8260C	75-00-3	CHLOROETHANE	UJ
RB01_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB01_0-2	SW8260C	60-29-7	ETHYL ETHER	UJ
RB01_0-2	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB01_14-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB01_14-15	SW8270D	88-74-4	2-NITROANILINE	UJ
RB01_14-15	SW8270D	88-75-5	2-NITROPHENOL	UJ
RB01_14-15	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB01_14-15	6010D	7440-70-2	CALCIUM, TOTAL	J
RB01_14-15	6010D	7440-50-8	COPPER, TOTAL	J
RB01_14-15	6010D	7439-92-1	LEAD, TOTAL	J
RB01_14-15	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB01_14-15	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB01_14-15	6010D	7440-66-6	ZINC, TOTAL	J
RB01_25-27	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB01_25-27	SW8260C	591-78-6	2-HEXANONE	UJ
RB01_25-27	SW8081B	50-29-3	4,4'-DDT	J

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RB01_25-27	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB01_25-27	6010D	7440-70-2	CALCIUM, TOTAL	J
RB01_25-27	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB01_25-27	6010D	7440-50-8	COPPER, TOTAL	J
RB01_25-27	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB01_25-27	6010D	7439-92-1	LEAD, TOTAL	J
RB01_25-27	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB01_25-27	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB01_25-27	6010D	7440-66-6	ZINC, TOTAL	J
RB01_9-11	SW8270D	88-74-4	2-NITROANILINE	UJ
RB01_9-11	SW8270D	88-75-5	2-NITROPHENOL	UJ
RB01_9-11	6010D	7440-70-2	CALCIUM, TOTAL	J
RB01_9-11	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB01_9-11	6010D	7440-50-8	COPPER, TOTAL	J
RB01_9-11	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB01_9-11	6010D	7439-92-1	LEAD, TOTAL	J
RB01_9-11	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB01_9-11	SW8151A	93-76-5	2,4,5-T	UJ
RB01_9-11	SW8151A	93-72-1	2,4,5-TP (SILVEX)	UJ
RB01_9-11	SW8151A	94-75-7	2,4-D	UJ
RB01_9-11	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB01_9-11	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB01_9-11	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB01_9-11	6010D	7440-66-6	ZINC, TOTAL	J
RB08_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB08_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB08_0-2	6010D	7440-70-2	CALCIUM, TOTAL	J
RB08_0-2	SW8081B	72-55-9	4,4'-DDE	J
RB08_0-2	SW8081B	50-29-3	4,4'-DDT	J
RB08_0-2	SW8081B	5103-71-9	CIS-CHLORDANE	J
RB08_0-2	6010D	7440-50-8	COPPER, TOTAL	J
RB08_0-2	6010D	7439-92-1	LEAD, TOTAL	J

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RB08_0-2	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB08_0-2	6010D	7440-66-6	ZINC, TOTAL	J
RB08_10-12	6010D	7440-70-2	CALCIUM, TOTAL	J
RB08_10-12	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB08_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB08_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB08_10-12	6010D	7440-50-8	COPPER, TOTAL	J
RB08_10-12	6010D	7439-92-1	LEAD, TOTAL	J
RB08_10-12	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB08_10-12	6010D	7440-66-6	ZINC, TOTAL	J
RB08_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB08_10-12	SW8260C	75-00-3	CHLOROETHANE	UJ
RB08_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB08_10-12	SW8260C	60-29-7	ETHYL ETHER	UJ
RB08_10-12	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB08_12-14	6010D	7440-70-2	CALCIUM, TOTAL	J
RB08_12-14	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB08_12-14	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB08_12-14	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB08_12-14	6010D	7440-50-8	COPPER, TOTAL	J
RB08_12-14	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB08_12-14	6010D	7439-92-1	LEAD, TOTAL	J
RB08_12-14	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB08_12-14	6010D	7440-66-6	ZINC, TOTAL	J
RB08_14-16	6010D	7440-70-2	CALCIUM, TOTAL	J
RB08_14-16	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB08_14-16	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB08_14-16	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB08_14-16	SW8260C	67-64-1	ACETONE	J
RB08_14-16	6010D	7440-50-8	COPPER, TOTAL	J
RB08_14-16	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB08_14-16	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ

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RB08_14-16	6010D	7439-92-1	LEAD, TOTAL	J
RB08_14-16	6010D	9/7/7440	POTASSIUM, TOTAL	J
RB08_14-16	6010D	7440-66-6	ZINC, TOTAL	J
SODUP02_122718	6010D	7440-70-2	CALCIUM, TOTAL	J
SODUP02_122718	SW8260C	123-91-1	1,4-DIOXANE	UJ
SODUP02_122718	SW8260C	67-64-1	ACETONE	J
SODUP02_122718	6010D	7440-50-8	COPPER, TOTAL	J
SODUP02_122718	SW7471B	7439-97-6	MERCURY, TOTAL	J
SODUP02_122718	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
SODUP02_122718	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SODUP02_122718	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP02_122718	6010D	7439-92-1	LEAD, TOTAL	J
SODUP02_122718	6010D	9/7/7440	POTASSIUM, TOTAL	J
SODUP02_122718	6010D	7440-66-6	ZINC, TOTAL	J
SOFB02_122718	6010D	7440-50-8	COPPER, TOTAL	U (0.01)
SOFB02_122718	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SOFB02_122718	SW8270DSI M	91-58-7	2-CHLORONAPHTHALENE	UJ
SOFB02_122718	SW8270DSI M	91-57-6	2-METHYLNAPHTHALENE	UJ
SOFB02_122718	SW8270D	91-94-1	3,3'-DICHLOROBENZIDINE	UJ
SOFB02_122718	SW8270D	106-47-8	4-CHLOROANILINE	UJ
SOFB02_122718	SW8270DSI M	83-32-9	ACENAPHTHENE	UJ
SOFB02_122718	SW8270DSI M	208-96-8	ACENAPHTHYLENE	UJ
SOFB02_122718	SW8270DSI M	120-12-7	ANTHRACENE	UJ
SOFB02_122718	SW8270DSI M	56-55-3	BENZO(A)ANTHRACENE	UJ
SOFB02_122718	SW8270DSI M	50-32-8	BENZO(A)PYRENE	UJ
SOFB02_122718	SW8270DSI M	205-99-2	BENZO(B)FLUORANTHENE	UJ
SOFB02_122718	SW8270DSI M	191-24-2	BENZO(GHI)PERYLENE	J

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SOFB02_122718	SW8270DSI M	207-08-9	BENZO(K)FLUORANTHENE	UJ
SOFB02_122718	SW8270D	65-85-0	BENZOIC ACID	UJ
SOFB02_122718	SW8270DSI M	218-01-9	CHRYSENE	UJ
SOFB02_122718	SW8270DSI M	53-70-3	DIBENZO(A,H)ANTHRACENE	J
SOFB02_122718	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
SOFB02_122718	SW8270DSI M	206-44-0	FLUORANTHENE	UJ
SOFB02_122718	SW8270DSI M	86-73-7	FLUORENE	UJ
SOFB02_122718	SW8270DSI M	118-74-1	HEXACHLOROBENZENE	UJ
SOFB02_122718	SW8270DSI M	87-68-3	HEXACHLOROBUTADIENE	UJ
SOFB02_122718	SW8270DSI M	67-72-1	HEXACHLOROETHANE	UJ
SOFB02_122718	SW8270DSI M	193-39-5	INDENO(1,2,3-CD)PYRENE	J
SOFB02_122718	SW8270DSI M	91-20-3	NAPHTHALENE	UJ
SOFB02_122718	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOFB02_122718	SW8270DSI M	87-86-5	PENTACHLOROPHENOL	UJ
SOFB02_122718	SW8270DSI M	85-01-8	PHENANTHRENE	UJ
SOFB02_122718	SW8270DSI M	129-00-0	PYRENE	UJ
SOFB02_122718	SW8260C	78-93-3	2-BUTANONE	UJ
SOFB02_122718	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOFB02_122718	SW8260C	67-64-1	ACETONE	U (5)
SOFB02_122718	SW8260C	74-83-9	BROMOMETHANE	UJ
SOFB02_122718	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOFB02_122718	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOFB02_122718	SW8260C	108-05-4	VINYL ACETATE	UJ
SOTB03_122718	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB03_122718	SW8260C	78-93-3	2-BUTANONE	UJ

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SOTB03_122718	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB03_122718	SW8260C	67-64-1	ACETONE	J
SOTB03_122718	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB03_122718	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOTB03_122718	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOTB03_122718	SW8260C	108-05-4	VINYL ACETATE	UJ
WG1193824-1	SW8081B	50-29-3	4,4'-DDT	J
RB02_0-2	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB02_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB02_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB02_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB02_0-2	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB02_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB02_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB02_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB02_10-12	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB02_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB02_10-12	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB02_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB02_10-12	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB02_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB02_10-12	SW8081B	33213-65-9	ENDOSULFAN II	J
RB02_10-12	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB02_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB02_13-15	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB02_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB02_13-15	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB02_13-15	SW8260C	74-83-9	BROMOMETHANE	UJ
RB02_13-15	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB02_13-15	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB02_13-15	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
RB02_13-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ

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RB02_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB02_7-9	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB02_7-9	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB02_7-9	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB02_7-9	SW8260C	74-83-9	BROMOMETHANE	UJ
RB02_7-9	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB02_7-9	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB02_7-9	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB03_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB03_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
RB03_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB03_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_0-2	SW8260C	75-00-3	CHLOROETHANE	UJ
RB03_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB03_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB03_0-2	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB03_0-2	SW8260C	108-05-4	VINYL ACETATE	UJ
RB03_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB03_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB03_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB03_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_10-12	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB03_10-12	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_10-12	SW8260C	75-00-3	CHLOROETHANE	UJ
RB03_10-12	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB03_10-12	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB03_10-12	SW8260C	108-05-4	VINYL ACETATE	UJ
RB03_10-12	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB03_2-3	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ

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RB03_2-3	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB03_2-3	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB03_2-3	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_2-3	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_2-3	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_2-3	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_2-3	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_2-3	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_2-3	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB03_2-3	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB03_2-3	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB03_2-3	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB03_2-3	SW8081B	8001-35-2	TOXAPHENE	UJ
RB12_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB12_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB12_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB12_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB12_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB12_0-2	SW8260C	75-00-3	CHLOROETHANE	UJ
RB12_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB12_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
RB12_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB12_0-2	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB12_0-2	SW8260C	108-05-4	VINYL ACETATE	UJ
RB12_0-2	SW8081B	8001-35-2	TOXAPHENE	UJ
RB12_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB12_10-12	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
RB12_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB12_10-12	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB12_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB12_10-12	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB12_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	UJ

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RB12_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB12_10-12	SW8081B	8001-35-2	TOXAPHENE	UJ
RB12_8-9	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB12_8-9	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB12_8-9	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB12_8-9	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB12_8-9	SW8260C	74-83-9	BROMOMETHANE	UJ
RB12_8-9	SW8260C	75-00-3	CHLOROETHANE	UJ
RB12_8-9	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB12_8-9	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB12_8-9	SW8082A	11096-82-5	AROCLOR 1260	J
RB12_8-9	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB12_9-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB12_9-10	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB12_9-10	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB12_9-10	SW8260C	74-83-9	BROMOMETHANE	UJ
RB12_9-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB12_9-10	SW8260C	75-00-3	CHLOROETHANE	UJ
RB12_9-10	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB12_9-10	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB12_9-10	SW8260C	108-05-4	VINYL ACETATE	UJ
RB12_9-10	SW8081B	8001-35-2	TOXAPHENE	UJ
RB12_9-10	SW8081B	72-20-8	ENDRIN	J
RB12_9-10	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB12_9-10	SW8260C	75-01-4	VINYL CHLORIDE	UJ
SOTB02_122618	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOTB02_122618	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB02_122618	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB02_122618	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB02_122618	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB02_122618	SW8260C	67-64-1	ACETONE	UJ
SOTB02_122618	SW8260C	74-83-9	BROMOMETHANE	UJ

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RB03_17-18	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB03_17-18	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB03_17-18	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB03_17-18	SW8260C	74-83-9	BROMOMETHANE	UJ
RB03_17-18	SW8260C	75-00-3	CHLOROETHANE	UJ
RB03_17-18	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB03_17-18	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB03_17-18	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB03_17-18	SW8270D	108-95-2	PHENOL	UJ
RB03_17-18	SW8081B	8001-35-2	TOXAPHENE	UJ
RB03_17-18	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
RB03_17-18	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB04_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB04_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB04_0-2	SW8260C	78-93-3	2-BUTANONE	UJ
RB04_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB04_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB04_0-2	SW8260C	67-64-1	ACETONE	UJ
RB04_0-2	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB04_0-2	SW8081B	57-74-9	CHLORDANE	UJ
RB04_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB04_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB04_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB04_0-2	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB04_0-2	SW8260C	91-20-3	NAPHTHALENE	UJ
RB04_0-2	SW8260C	100-42-5	STYRENE	UJ
RB04_13-15	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB04_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB04_13-15	SW8260C	78-93-3	2-BUTANONE	UJ
RB04_13-15	SW8260C	591-78-6	2-HEXANONE	UJ
RB04_13-15	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ

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RB04_13-15	SW8260C	67-64-1	ACETONE	J
RB04_13-15	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB04_13-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB04_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB04_13-15	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB04_13-15	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB04_13-15	SW8260C	91-20-3	NAPHTHALENE	UJ
RB04_13-15	SW8260C	100-42-5	STYRENE	UJ
RB04_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB04_18-20	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB04_18-20	SW8260C	74-83-9	BROMOMETHANE	UJ
RB04_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB04_18-20	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB04_18-20	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB04_8-10	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB04_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB04_8-10	SW8260C	78-93-3	2-BUTANONE	UJ
RB04_8-10	SW8260C	591-78-6	2-HEXANONE	UJ
RB04_8-10	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB04_8-10	SW8260C	67-64-1	ACETONE	UJ
RB04_8-10	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB04_8-10	SW8081B	57-74-9	CHLORDANE	UJ
RB04_8-10	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB04_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB04_8-10	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB04_8-10	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB04_8-10	6010D	7439-92-1	LEAD, TOTAL	J
RB04_8-10	SW7471B	7439-97-6	MERCURY, TOTAL	J
RB04_8-10	SW8260C	91-20-3	NAPHTHALENE	UJ

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RB04_8-10	SW8260C	100-42-5	STYRENE	UJ
RB04_8-10	6010D	7440-66-6	ZINC, TOTAL	J
RB05_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB05_0-2	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB05_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB05_0-2	SW8081B	57-74-9	CHLORDANE	UJ
RB05_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB05_0-2	6010D	7439-89-6	IRON, TOTAL	J
RB05_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB05_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB05_0-2	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB05_13-15	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB05_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB05_13-15	SW8260C	78-93-3	2-BUTANONE	UJ
RB05_13-15	SW8260C	591-78-6	2-HEXANONE	UJ
RB05_13-15	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB05_13-15	SW8260C	67-64-1	ACETONE	J
RB05_13-15	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB05_13-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB05_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB05_13-15	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB05_13-15	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB05_13-15	SW8260C	91-20-3	NAPHTHALENE	UJ
RB05_13-15	SW8260C	100-42-5	STYRENE	UJ
RB05_19-21	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB05_19-21	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB05_19-21	SW8260C	78-93-3	2-BUTANONE	UJ
RB05_19-21	SW8260C	591-78-6	2-HEXANONE	UJ
RB05_19-21	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB05_19-21	SW8260C	67-64-1	ACETONE	J

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RB05_19-21	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB05_19-21	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB05_19-21	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB05_19-21	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB05_19-21	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB05_19-21	SW8260C	91-20-3	NAPHTHALENE	UJ
RB05_19-21	SW8260C	100-42-5	STYRENE	UJ
RB05_8-10	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB05_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB05_8-10	SW8260C	78-93-3	2-BUTANONE	UJ
RB05_8-10	SW8260C	591-78-6	2-HEXANONE	UJ
RB05_8-10	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB05_8-10	SW8260C	67-64-1	ACETONE	UJ
RB05_8-10	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB05_8-10	SW8081B	57-74-9	CHLORDANE	UJ
RB05_8-10	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB05_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB05_8-10	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB05_8-10	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB05_8-10	SW8260C	91-20-3	NAPHTHALENE	UJ
RB05_8-10	SW8260C	100-42-5	STYRENE	UJ
RB06_0-2	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB06_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB06_0-2	SW8260C	78-93-3	2-BUTANONE	UJ
RB06_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB06_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB06_0-2	SW8260C	67-64-1	ACETONE	UJ
RB06_0-2	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB06_0-2	SW8081B	57-74-9	CHLORDANE	UJ

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RB06_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB06_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB06_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB06_0-2	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB06_0-2	SW8260C	91-20-3	NAPHTHALENE	UJ
RB06_0-2	SW8260C	100-42-5	STYRENE	UJ
RB06_10-12	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB06_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB06_10-12	SW8260C	78-93-3	2-BUTANONE	UJ
RB06_10-12	SW8260C	591-78-6	2-HEXANONE	UJ
RB06_10-12	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB06_10-12	SW8260C	67-64-1	ACETONE	J
RB06_10-12	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB06_10-12	SW8081B	57-74-9	CHLORDANE	UJ
RB06_10-12	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB06_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB06_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB06_10-12	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB06_10-12	SW8260C	91-20-3	NAPHTHALENE	UJ
RB06_10-12	SW8260C	100-42-5	STYRENE	UJ
RB06_8-10	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	UJ
RB06_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB06_8-10	SW8260C	78-93-3	2-BUTANONE	UJ
RB06_8-10	SW8260C	591-78-6	2-HEXANONE	UJ
RB06_8-10	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB06_8-10	SW8260C	67-64-1	ACETONE	J
RB06_8-10	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
RB06_8-10	SW8081B	57-74-9	CHLORDANE	UJ
RB06_8-10	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB06_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	J

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RB06_8-10	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB06_8-10	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
RB06_8-10	SW8260C	91-20-3	NAPHTHALENE	UJ
RB06_8-10	SW8260C	100-42-5	STYRENE	UJ
SODUP01_122118	SW8260C	123-91-1	1,4-DIOXANE	UJ
SODUP01_122118	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
SODUP01_122118	SW8260C	74-83-9	BROMOMETHANE	UJ
SODUP01_122118	SW8081B	57-74-9	CHLORDANE	UJ
SODUP01_122118	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP01_122118	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SODUP01_122118	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
SODUP01_122118	6010D	7439-92-1	LEAD, TOTAL	J
SODUP01_122118	SW7471B	7439-97-6	MERCURY, TOTAL	J
SODUP01_122118	6010D	7440-66-6	ZINC, TOTAL	J
SOFB01_122118	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOFB01_122118	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOFB01_122118	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SOFB01_122118	SW8260C	78-93-3	2-BUTANONE	UJ
SOFB01_122118	SW8260C	591-78-6	2-HEXANONE	UJ
SOFB01_122118	SW8270D	91-94-1	3,3'-DICHLOROBENZIDINE	UJ
SOFB01_122118	SW8081B	72-54-8	4,4'-DDD	UJ
SOFB01_122118	SW8081B	72-55-9	4,4'-DDE	UJ
SOFB01_122118	SW8081B	50-29-3	4,4'-DDT	UJ
SOFB01_122118	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOFB01_122118	SW8260C	67-64-1	ACETONE	UJ
SOFB01_122118	SW8081B	309-00-2	ALDRIN	UJ
SOFB01_122118	SW8081B	319-84-6	ALPHA-BHC	UJ
SOFB01_122118	SW8081B	319-85-7	BETA-BHC	UJ
SOFB01_122118	SW8260C	74-83-9	BROMOMETHANE	UJ
SOFB01_122118	SW8081B	57-74-9	CHLORDANE	UJ

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SOFB01_122118	SW8081B	5103-71-9	CIS-CHLORDANE	UJ
SOFB01_122118	6010D	7440-50-8	COPPER, TOTAL	U (0.01)
SOFB01_122118	SW8081B	319-86-8	DELTA-BHC	UJ
SOFB01_122118	SW8081B	60-57-1	DIELDRIN	UJ
SOFB01_122118	SW8081B	959-98-8	ENDOSULFAN I	UJ
SOFB01_122118	SW8081B	33213-65-9	ENDOSULFAN II	UJ
SOFB01_122118	SW8081B	1031-07-8	ENDOSULFAN SULFATE	UJ
SOFB01_122118	SW8081B	72-20-8	ENDRIN	UJ
SOFB01_122118	SW8081B	7421-93-4	ENDRIN ALDEHYDE	UJ
SOFB01_122118	SW8081B	53494-70-5	ENDRIN KETONE	UJ
SOFB01_122118	SW8081B	76-44-8	HEPTACHLOR	UJ
SOFB01_122118	SW8081B	1024-57-3	HEPTACHLOR EPOXIDE	UJ
SOFB01_122118	SW8081B	58-89-9	LINDANE	UJ
SOFB01_122118	SW8081B	72-43-5	METHOXYCHLOR	UJ
SOFB01_122118	SW8081B	8001-35-2	TOXAPHENE	UJ
SOFB01_122118	SW8081B	5103-74-2	TRANS-CHLORDANE	UJ
SOTB01_122118	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SOTB01_122118	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB01_122118	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB01_122118	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB01_122118	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB01_122118	SW8260C	67-64-1	ACETONE	UJ
SOTB01_122118	SW8260C	74-83-9	BROMOMETHANE	UJ
RB07_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB07_0-2	SW8081B	5103-71-9	CIS-CHLORDANE	J
RB07_0-2	SW8081B	60-57-1	DIELDRIN	J
RB07_0-2	SW8081B	1031-07-8	ENDOSULFAN SULFATE	J
RB07_0-2	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB07_0-2	6010D	7440-39-3	BARIUM, TOTAL	J
RB07_0-2	SW8260C	74-83-9	BROMOMETHANE	UJ
RB07_0-2	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB07_0-2	SW8260C	74-87-3	CHLOROMETHANE	UJ

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RB07_0-2	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB07_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB07_0-2	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB07_0-2	6010D	7439-92-1	LEAD, TOTAL	J
RB07_0-2	SW7471B	7439-97-6	MERCURY, TOTAL	U (0.15)
RB07_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB07_0-2	6010D	7440-66-6	ZINC, TOTAL	J
RB07_10-12	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB07_10-12	6010D	7440-39-3	BARIUM, TOTAL	J
RB07_10-12	SW8270D	65-85-0	BENZOIC ACID	UJ
RB07_10-12	SW8260C	74-83-9	BROMOMETHANE	UJ
RB07_10-12	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB07_10-12	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB07_10-12	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB07_10-12	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB07_10-12	SW8081B	72-54-8	4,4'-DDD	J
RB07_10-12	6010D	7439-92-1	LEAD, TOTAL	J
RB07_10-12	SW8081B	72-55-9	4,4'-DDE	J
RB07_10-12	SW8081B	50-29-3	4,4'-DDT	J
RB07_10-12	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB07_10-12	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB07_8-10	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB07_8-10	SW8270D	106-47-8	4-CHLOROANILINE	UJ
RB07_8-10	6010D	7440-39-3	BARIUM, TOTAL	J
RB07_8-10	SW8260C	74-83-9	BROMOMETHANE	UJ
RB07_8-10	SW8260C	75-15-0	CARBON DISULFIDE	UJ
RB07_8-10	SW8260C	74-87-3	CHLOROMETHANE	UJ
RB07_8-10	SW8081B	5103-71-9	CIS-CHLORDANE	J
RB07_8-10	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB07_8-10	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
RB07_8-10	SW8081B	5103-74-2	TRANS-CHLORDANE	J
RB07_8-10	6010D	7439-92-1	LEAD, TOTAL	J

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RB07_8-10	SW7471B	7439-97-6	MERCURY, TOTAL	U (0.171)
RB07_8-10	SW8260C	75-01-4	VINYL CHLORIDE	UJ
RB10_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB10_0-2	SW8260C	78-93-3	2-BUTANONE	UJ
RB10_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB10_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB10_0-2	SW8260C	67-64-1	ACETONE	UJ
RB10_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB10_0-2	SW8260C	108-05-4	VINYL ACETATE	UJ
RB10_0-2	6010D	7440-36-0	ANTIMONY, TOTAL	U (4.27)
RB10_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB10_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB10_0-2	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB10_18-20	6010D	7440-36-0	ANTIMONY, TOTAL	U (5.45)
RB10_18-20	SW8270D	205-99-2	BENZO(B)FLUORANTHENE	J
RB10_18-20	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB10_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB10_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB10_18-20	SW8260C	591-78-6	2-HEXANONE	UJ
RB10_18-20	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB10_18-20	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB10_33-35	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB10_33-35	SW8260C	78-93-3	2-BUTANONE	UJ
RB10_33-35	SW8260C	591-78-6	2-HEXANONE	UJ
RB10_33-35	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB10_33-35	SW8260C	67-64-1	ACETONE	UJ
RB10_33-35	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB10_33-35	SW8260C	108-05-4	VINYL ACETATE	UJ
RB10_33-35	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB10_33-35	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB15_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB15_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ

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RB15_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB15_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB15_0-2	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB15_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB15_18-20	SW8270D	51-28-5	2,4-DINITROPHENOL	UJ
RB15_18-20	SW8151A	93-76-5	2,4,5-T	UJ
RB15_18-20	6010D	7440-36-0	ANTIMONY, TOTAL	U (3.99)
RB15_18-20	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB15_18-20	SW8270D	65-85-0	BENZOIC ACID	UJ
RB15_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	J
RB15_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB15_18-20	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB15_18-20	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
RB15_23-25	SW8151A	93-76-5	2,4,5-T	UJ
RB15_23-25	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
RB15_23-25	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB15_23-25	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB15_23-25	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB15_23-25	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB15_23-25	SW8260C	71-43-2	BENZENE	J
RB15_23-25	SW8270D	91-20-3	NAPHTHALENE	J
RB15_23-25	SW8260C	103-65-1	N-PROPYLBENZENE	J
RB15_28-30	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	J
RB15_28-30	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB15_28-30	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB15_28-30	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB16_0-2	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB16_0-2	SW8260C	78-93-3	2-BUTANONE	UJ
RB16_0-2	SW8260C	591-78-6	2-HEXANONE	UJ
RB16_0-2	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB16_0-2	SW8260C	67-64-1	ACETONE	UJ
RB16_0-2	SW8260C	107-13-1	ACRYLONITRILE	UJ

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RB16_0-2	SW8151A	93-76-5	2,4,5-T	UJ
RB16_0-2	SW8260C	108-05-4	VINYL ACETATE	UJ
RB16_0-2	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB16_0-2	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB16_13-15	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB16_13-15	SW8260C	78-93-3	2-BUTANONE	UJ
RB16_13-15	SW8260C	591-78-6	2-HEXANONE	UJ
RB16_13-15	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB16_13-15	SW8260C	67-64-1	ACETONE	UJ
RB16_13-15	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB16_13-15	SW8151A	93-76-5	2,4,5-T	UJ
RB16_13-15	SW8260C	108-05-4	VINYL ACETATE	UJ
RB16_13-15	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB16_13-15	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB16_13-15	SW8270D	85-68-7	BUTYL BENZYL PHTHALATE	UJ
RB16_18-20	SW8260C	123-91-1	1,4-DIOXANE	UJ
RB16_18-20	SW8260C	78-93-3	2-BUTANONE	UJ
RB16_18-20	SW8260C	591-78-6	2-HEXANONE	UJ
RB16_18-20	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
RB16_18-20	SW8260C	67-64-1	ACETONE	UJ
RB16_18-20	SW8260C	107-13-1	ACRYLONITRILE	UJ
RB16_18-20	SW8151A	93-76-5	2,4,5-T	UJ
RB16_18-20	SW8260C	108-05-4	VINYL ACETATE	UJ
RB16_18-20	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
RB16_18-20	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
RB16_18-20	SW8270D	108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	UJ
SODUP05_010819	SW8151A	93-76-5	2,4,5-T	UJ
SODUP05_010819	SW8270D	91-57-6	2-METHYLNAPHTHALENE	J
SODUP05_010819	SW7196A	18540-29-9	CHROMIUM, HEXAVALENT	UJ
SODUP05_010819	SW9012B	57-12-5	CYANIDE, TOTAL	UJ
SODUP05_010819	SW8260C	123-91-1	1,4-DIOXANE	UJ
SODUP05_010819	SW8260C	591-78-6	2-HEXANONE	UJ

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SODUP05_010819	SW8260C	107-13-1	ACRYLONITRILE	UJ
SODUP05_010819	SW8260C	71-43-2	BENZENE	J
SODUP05_010819	SW8270D	91-20-3	NAPHTHALENE	J
SODUP05_010819	SW8260C	103-65-1	N-PROPYLBENZENE	J
SOFB04_010819	SW8270D	100-02-7	4-NITROPHENOL	UJ
SOFB04_010819	SW8270D	208-96-8	ACENAPHTHYLENE	UJ
SOFB04_010819	SW8270D	131-11-3	DIMETHYL PHTHALATE	UJ
SOFB04_010819	SW8081B	8001-35-2	TOXAPHENE	UJ
SOFB04_010819	SW8270D	59-50-7	P-CHLORO-M-CRESOL	UJ
SOFB04_010819	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOFB04_010819	SW8260C	78-93-3	2-BUTANONE	UJ
SOFB04_010819	SW8260C	591-78-6	2-HEXANONE	UJ
SOFB04_010819	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOFB04_010819	SW8260C	67-64-1	ACETONE	UJ
SOFB04_010819	SW8260C	107-13-1	ACRYLONITRILE	UJ
SOFB04_010819	SW8260C	74-83-9	BROMOMETHANE	UJ
SOFB04_010819	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOFB04_010819	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SOFB04_010819	SW8260C	87-68-3	HEXACHLOROBUTADIENE	UJ
SOTB07_010819	SW8260C	96-12-8	1,2-DIBROMO-3- CHLOROPROPANE	UJ
SOTB07_010819	SW8260C	123-91-1	1,4-DIOXANE	UJ
SOTB07_010819	SW8260C	78-93-3	2-BUTANONE	UJ
SOTB07_010819	SW8260C	591-78-6	2-HEXANONE	UJ
SOTB07_010819	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
SOTB07_010819	SW8260C	67-64-1	ACETONE	UJ
SOTB07_010819	SW8260C	107-13-1	ACRYLONITRILE	UJ
SOTB07_010819	SW8260C	74-83-9	BROMOMETHANE	UJ
SOTB07_010819	SW8260C	74-87-3	CHLOROMETHANE	UJ
SOTB07_010819	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ

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MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by SW-846 Method 8260C

L1852610

The initial calibration (ICAL) for instrument VOA110 exhibited a response factor (RF) below the control limit for 1,4-dioxane (0.005). The associated results in sample RB07_0-2, RB07_8-10, and RB07_10-12 are qualified as "UJ" based on potential indeterminate bias.

The continuing calibration verification (CCV) analyzed on 12/28/2018 at 7:57 exhibited a percent difference (%D) above the control limit for dichlorodifluoromethane (-38.1%), chloromethane (-34.3%), vinyl chloride (-29.2%), bromomethane (-58.3%), and carbon disulfide (20.5%). The associated results in sample RB07_0-2, RB07_8-10, and RB07_10-12 are qualified as "UJ" based on potential indeterminate bias.

L1852926

The lab control sample and lab control sample duplicate (LCS/LCSD) for batch WG1194240 exhibited a percent recovery below the lower control limit (LCL) for 2-butanone (59%, 54%) and 2-hexanone (60%, 64%). The associated results in sample RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, RB04_13-15, and SOFB01_122118 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA100 exhibited a RF below the control limit for 1,4-dioxane (0.002) and 4-methyl-2-pentanone (0.089). The associated results in sample RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, and RB04_13-15 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and 1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB01_122118 and SOFB01_122118 are qualified as "UJ" based on potential indeterminate bias.

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The ICAL for instrument CHARLIE exhibited a RF below the control limit for 1,4-dioxane (0.004). The associated results in sample RB05_0-2, SODUP01_122118, and RB04_18-20 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 8:29 exhibited a %D above the control limit for bromomethane (52.8%). The associated results in sample SOTB01_122118 and SOFB01_122118 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 12:33 exhibited a %D above the control limit for dichlorodifluoromethane (20.2%), acetone (28.3%), 2-butanone (40.9%), 2-hexanone (39.8%), styrene (20.5%), 1,2,4,5-tetramethylbenzene (22.3%), and naphthalene (20.2%). The associated results in sample RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, and RB04_13-15 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 6:48 exhibited a %D above the control limit for dichlorodifluoromethane (40.6%) and bromomethane (31.4%). The associated results in sample RB05_0-2, SODUP01_122118, and RB04_18-20 are qualified as "UJ" based on potential indeterminate bias.

L1853110

The LCSD for batch WG1194817 exhibited a percent recovery below the LCL for bromomethane (56%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA117 exhibited a RF below the control limit for acrylonitrile (0.05), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.074). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/4/2019 at 6:13 exhibited a %D above the control limit for chloromethane (28.4%), vinyl chloride (29.9%), bromomethane (42.8%), chloroethane (43.9%), and trichlorofluoromethane (25.5%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential indeterminate bias.

L1853111

The LCS/LCSD for batch WG1194605 exhibited a percent recovery below the LCL for bromomethane (42%, 46%), chloroethane (48%, 48%), trichlorofluoromethane (63%, 64%), vinyl acetate (53%, 64%), and vinyl chloride (63%, 63%). The associated results in sample

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RB03_0-2, RB03_10-12, RB12_0-2, and RB12_9-10 are qualified as "UJ" based on potential low bias.

The LCSD for batch WG1194817 exhibited a percent recovery below the LCL for bromomethane (56%). The associated results in sample RB12_8-9 are qualified as "UJ" based on potential low bias.

The field duplicate and parent sample (SODUP02_122718 and RB08_14-16) exhibited a relative percent difference (RPD) above the control limit for acetone (98%). The associated results are qualified as "J" based on potential indeterminate bias.

The ICAL for instrument VOA117 exhibited a RF below the control limit for acrylonitrile (0.05), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.074). The associated results in sample RB03_0-2, RB03_10-12, RB12_0-2, RB12_8-9, and RB12_9-10 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and 1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB02_122618 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument CHARLIE exhibited a RF below the control limit for 1,4-dioxane (0.004). The associated results in sample RB03_2-3, RB12_10-12, RB02_0-2, RB02_7-9, RB02_10-12, and RB02_13-15 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 8:29 exhibited a %D above the control limit for bromomethane (52.8%). The associated results in sample SOTB02_122618 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 16:38 exhibited a %D above the control limit for chloromethane (29.4%), vinyl chloride (36.6%), bromomethane (58.3%), chloroethane (52%), trichlorofluoromethane (36.6%), and vinyl acetate (47%). The associated results in sample RB03_0-2, RB03_10-12, RB12_0-2, and RB12_9-10 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 17:43 exhibited a %D above the control limit for dichlorodifluoromethane (40.3%), bromomethane (27.5%), 1,1-dichloroethene (22.6%), carbon disulfide (21.8%), and acrylonitrile (21.1%). The associated results in sample RB03_2-3, RB12_10-12, RB02_0-2, RB02_7-9, RB02_10-12, and RB02_13-15 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 1/4/2019 at 6:13 exhibited a %D above the control limit for chloromethane (28.4%), vinyl chloride (29.9%), bromomethane (42.8%), chloroethane (43.9%), trichlorofluoromethane (25.5%), and acrylonitrile (26%). The associated results in sample RB12_8-9 are qualified as "UJ" based on potential indeterminate bias.

L1853234

The trip blank (TB) (SOTB03_122718) exhibited a detection of acetone (1.6 ug/l). The associated results in sample SOFB02_122718 are qualified as "U" at the reporting limit based on potential blank contamination.

The ICAL for instrument ELAINE exhibited a RF below the control limit for acetone (0.053), 2-butanone (0.072), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.076). The associated results in sample SOTB03_122718 and SOFB02_122718 are qualified as "J" or "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.004). The associated results in sample RB01_0-2 and RB01_25-27 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument CHARLIE exhibited a RF below the control limit for 1,4-dioxane (0.004). The associated results in sample RB01_0-2 and RB08_10-12 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.003). The associated results in sample RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 6:28 exhibited a %D above the control limit for trichlorofluoromethane (-34.1%), 4-methyl-2-pentanone (22.5%), and 2-hexanone (29.9%). The associated results in sample RB01_0-2 and RB01_25-27 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 18:08 exhibited a %D above the control limit for dichlorodifluoromethane (40.6%), bromomethane (35.8%), chloroethane (28.5%), and trichlorofluoromethane (26.5%). The associated results in sample RB01_0-2 and RB08_10-12 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 8:32 exhibited a %D above the control limit for dichlorodifluoromethane (43.5%), chloromethane (30.9%), bromomethane (50.9%), and vinyl

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acetate (-27.1%). The associated results in sample SOTB03_122718 and SOFB02_122718 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/4/2019 at 12:27 exhibited a %D above the control limit for dichlorodifluoromethane (-23.2%). The associated results in sample RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "UJ" based on potential indeterminate bias.

L1900156

The field duplicate and parent sample (SODUP03_010219 and RB09_19-21) exhibited a RPD above the control limit for 1,2,4,5-tetramethylbenzene (72%), 1,4-diethylbenzene (70%), benzene (78%), isopropylbenzene (74%), n-butylbenzene (64%), n-propylbenzene (71%), and sec-butylbenzene (68%). The associated results are qualified as "J" based on potential indeterminate bias.

The ICAL for instrument ELAINE exhibited a RF below the control limit for acetone (0.053), 2-butanone (0.072), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.076). The associated results in sample SOTB04_010219 are qualified as "J" or "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.003). The associated results in sample RB09_0-2, RB09_19-21, RB09_28-30, RB11_0-2, RB11_19-21, RB11_28-30, and SODUP03_010219 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 8:32 exhibited a %D above the control limit for dichlorodifluoromethane (43.5%), chloromethane (30.9%), bromomethane (50.9%), vinyl acetate (-27.1%), and 2,2-dichloropropane (32.7%). The associated results in sample SOTB04_010219 are qualified as "UJ" based on potential indeterminate bias.

L1900324

The method blank (MB) for batch WG1195498 exhibited a detection of bromomethane (0.96 ug/kg). The associated results in sample RB22_3-5 are qualified as "U" at the reporting limit based on potential blank contamination.

The ICAL for instrument VOA110 exhibited a RF below the control limit for 1,4-dioxane (0.005). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, and RB19_24-25 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and

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1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB05_010319 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.003). The associated results in sample RB19_20-22 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/6/2019 at 10:13 exhibited a %D above the control limit for bromomethane (52.8) and vinyl acetate (-24). The associated results in sample SOTB05_010319 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/7/2019 at 12:47 exhibited a %D above the control limit for dichlorodifluoromethane (-45.3), chloromethane (-48.5), vinyl chloride (-38), bromomethane (-61.7), 4-ethyltoluene (20.6), 1,2,3-trichloropropane (20.4), and 1,2,4,5-tetramethylbenzene (20.3). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, and RB19_24-25 are qualified as "UJ" based on potential indeterminate bias.

L1900536

The LCS/LCSD for batch WG1195525 exhibited a percent recovery below the LCL for 1,2,3-trichlorobenzene (66%, 69%) and naphthalene (64%, 68%). The associated results in sample SOTB06_010419 are qualified as "UJ" based on potential low bias.

The LCSD for batch WG1196289 exhibited a percent recovery below the LCL for 2-hexanone (68%). The associated results in sample RB20_0-2 and RB22_20-22 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA100 exhibited a RF below the control limit for 1,4-dioxane (0.002) and 4-methyl-2-pentanone (0.089). The associated results in sample RB20_0-2 and RB22_20-22 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and 1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB06_010419 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA123 exhibited a RF below the control limit for 1,4-dioxane (0.003). The associated results in sample RB17_8-10, RB18_0-2, and RB18_6-8 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 1/7/2019 at 7:48 exhibited a %D above the control limit for bromomethane (34.9%), 1,2,4-trichlorobenzene (22.1%), naphthalene (36%), and 1,2,3-trichlorobenzene (33.9%). The associated results in sample SOTB06_010419 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/9/2019 at 14:20 exhibited a %D above the control limit for chloromethane (-31.3%), bromomethane (-29%), 1,4-dioxane (21.2%), tert-butylbenzene (-20.1%), p-isopropyltoluene (-22.6%), and n-butylbenzene (-23.2%). The associated results in sample RB17_0-2, RB17_4-6, RB17_18-20, RB18_15-17, RB18_18-20, RB20_7-9, RB20_13-15, and RB20_18-20 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/9/2019 at 17:55 exhibited a %D above the control limit for dichlorodifluoromethane (-37.1%), vinyl chloride (-23.4%), acetone (32.6%), and 2-hexanone (28%). The associated results in sample RB20_0-2 and RB22_20-22 are qualified as "J" or "UJ" based on potential indeterminate bias.

L1900707

The LCSD for batch WG1195621 exhibited a percent recovery below the LCL for 4-chloroaniline (39%). The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_23-25, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential low bias.

The ICAL for instrument VOA101 exhibited a RF below the control limit for acetone (0.024), 2-butanone (0.041), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.045), 2-hexanone (0.078), and 1,2-dibromo-3-chloropropane (0.046). The associated results in sample SOTB06_010719 and SOFB03_010719 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA111 exhibited a RF below the control limit for 4-methyl-2-pentanone (0.087). The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_23-25, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/8/2019 at 7:13 exhibited a %D above the control limit for dichlorodifluoromethane (27.9%), bromomethane (46.2%), trichlorofluoromethane (20.3%), freon-113 (21.5%), naphthalene (20.1%), and 1,2,3-trichlorobenzene (22.2%). The associated results in sample SOTB06_010719 and SOFB03_010719 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 1/10/2019 at 6:46 exhibited a %D above the control limit for 1,2-dichloroethane (21.4%). The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_23-25, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential indeterminate bias.

L1900879

The LCS/LCSD for batch WG1195687 exhibited a RPD above the control limit for hexachlorobutadiene (33%). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

The LCS/LCSD for batch WG1196485 exhibited a percent recovery below the LCL for bromomethane (37%, 37%) and 1,4-dioxane (30%). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1196736 exhibited a percent recovery below the LCL for 2-butanone (60%, 58%) and 2-hexanone (69%, 64%). The associated results in sample RB10_0-2, RB10_33-35, RB16_0-2, RB16_13-15, and RB16_18-20 are qualified as "UJ" based on potential low bias.

The field duplicate and parent sample (SODUP05_010819 and RB15_23-25) exhibited a RPD above the control limit for benzene (74%) and n-propylbenzene (65%). The associated results are qualified as "J" based on potential indeterminate bias.

The ICAL for instrument VOA105 exhibited a RF below the control limit for acetone (0.02), acrylonitrile (0.026), 2-butanone (0.031), 1,4-dioxane (0.001), 4-methyl-2-pentanone (0.035), 2-hexanone (0.054), and 1,2-dibromo-3-chloropropane (0.033). The associated results in sample SOTB07_010819 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA122 exhibited a RF below the control limit for acrylonitrile (0.043), 2-butanone (0.057), 1,4-dioxane (0.001), and 4-methyl-2-pentanone (0.065). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA100 exhibited a RF below the control limit for 1,4-dioxane (0.002) and 4-methyl-2-pentanone (0.089). The associated results in sample RB10_0-2, RB10_33-35, RB16_0-2, RB16_13-15, and RB16_18-20 are qualified as "UJ" based on potential indeterminate bias.

The ICAL for instrument VOA117 exhibited a RF below the control limit for acrylonitrile (0.037) and 1,4-dioxane (0.002). The associated results in sample RB10_18-20, RB15_0-2, RB15_18-20,

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RB15_23-25, SODUP05_010819, and RB15_28-30 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/9/2019 at 9:26 exhibited a %D above the control limit for dichlorodifluoromethane (35.7%), chloromethane (26.3%), and bromomethane (26.4%). The associated results in sample SOTB07_010819 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/10/2019 at 10:27 exhibited a %D above the control limit for dichlorodifluoromethane (38.2%), chloromethane (35%), bromomethane (63.1%), acetone (38.3%), 2-hexanone (23.6%), and hexachlorobutadiene (34.6%). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/10/2019 at 17:55 exhibited a %D above the control limit for 2-hexanone (20.3%). The associated results in sample RB10_18-20, RB15_0-2, and SODUP05_010819 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/10/2019 at 18:23 exhibited a %D above the control limit for acetone (26%), acrylonitrile (24%), vinyl acetate (20.1%), 2-butanone (40.5%), and 2-hexanone (31.1%). The associated results in sample RB10_0-2, RB10_33-35, RB16_0-2, RB16_13-15, and RB16_18-20 are qualified as "UJ" based on potential indeterminate bias.

SVOCs by SW-846 Method 8270D and 8270C-SIM:

L1852610

The LCS/LCSD for batch WG1192476 exhibited a RPD above the control limit for benzoic acid (65%). The associated results in sample RB07_10-12 are qualified as "UJ" based on potential indeterminate bias.

The LCS for batch WG1193985 exhibited a percent recovery below the LCL for 4-chloroaniline (35%). The associated results in sample RB07_0-2 and RB07_8-10 are qualified as "UJ" based on potential low bias.

L1852926

The LCS/LCSD for batch WG1192882 exhibited a RPD above the control limit for 3,3'-dichlorobenzidine (39%). The associated results in sample SOFB01_122118 are qualified as "UJ" based on potential indeterminate bias.

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The LCS/LCSD for batch WG1192882 exhibited a percent recovery below the LCL for 2,4-dimethylphenol (29%). The associated results in sample SOFB01_122118 are qualified as "UJ" based on potential low bias.

The CCV analyzed on 12/29/2018 at 22:30 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (21.5%) and hexachlorocyclopentadiene (21.6%). The associated results in sample RB05_0-2, RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, RB04_13-15, SODUP01_122118, and RB04_18-20 are qualified as "UJ" based on potential indeterminate bias.

L1853110

The LCSD for batch WG1193175 exhibited a percent recovery below the LCL for phenol (93%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential low bias.

L1853234

The LCSD for batch WG1193790 exhibited a percent recovery below the LCL for 2,4-dimethylphenol (29%), 3,3'-dichlorobenzidine (35%), and 4-chloroaniline (38%). The associated results in sample SOFB02_122718 are qualified as "UJ" based on potential low bias.

The LCSD for batch WG1194326 exhibited a percent recovery below the LCL for ethyl ether (65%). The associated results in sample RB01_0-2 and RB08_10-12 are qualified as "UJ" based on potential low bias.

The sample SOFB02_122718 was extracted outside of the holding time by 1 day. The associated results are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/3/2019 at 22:17 exhibited a %D above the control limit for benzoic acid (21.1%). The associated results in sample SOFB02_122718 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/6/2019 at 19:32 exhibited a %D above the control limit for 2-nitrophenol (-34.3%), 2-nitroaniline (-23.2%), and pentachlorophenol (-23.4%). The associated results in sample RB01_14-15 and RB01_9-11 are qualified as "UJ" based on potential indeterminate bias.

L1900156

The LCS/LCSD for batch WG1194535 exhibited a percent recovery above the upper control limit (UCL) for biphenyl (106%, 110%). The associated results in sample SODUP03_010219 are qualified as "J" based on potential high bias.

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The field duplicate and parent sample (SODUP03_010219 and RB09_19-21) exhibited a RPD above the control limit for 2-methylnaphthalene (86%), fluoranthene (68%), naphthalene (107%), phenanthrene (70%), and pyrene (69%). The associated results are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 1/8/2019 at 6:45 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (21). The associated results in sample SODUP03_010219 and RB11_19-21 are qualified as "UJ" based on potential indeterminate bias.

L1900324

The CCV analyzed on 1/5/2019 at 10:06 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (21.9%), 2-nitrophenol (-28.1%), 4,6-dinitro-o-cresol (-23%), di-n-butylphthalate (-20.6%), butyl benzyl phthalate (-35%), bis(2-ethylhexyl)phthalate (-22.4%), and di-n-octylphthalate (-22.4%). The associated results in sample RB21_2-4 are qualified as "UJ" based on potential indeterminate bias.

L1900536

The CCV analyzed on 1/7/2019 at 7:21 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (20.3%), 2,4-dinitrophenol (-31.6%), pentachlorophenol (-20.9%), butyl benzyl phthalate (-26.5%), and di-n-octylphthalate (-34.2%). The associated results in sample RB17_0-2, RB17_18-20, RB18_15-17, RB18_18-20, RB20_7-9, RB20_13-15, RB20_18-20, and RB22_20-22 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/7/2019 at 13:14 exhibited a %D above the control limit for hexachlorocyclopentadiene (20.5%). The associated results in sample RB17_4-6, RB17_8-10, RB20_0-2 are qualified as "UJ" based on potential indeterminate bias.

L1900707

The CCV analyzed on 1/9/2019 at 14:05 exhibited a %D above the control limit for 2,4-dinitrotoluene (-42.7%). The associated results in sample SOFB03_010719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/10/2019 at 12:11 exhibited a %D above the control limit for 2,4-dinitrophenol (26.9%). The associated results in sample RB13_22-24 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 1/11/2019 at 7:37 exhibited a %D above the control limit for 4-nitroaniline (23.1%). The associated results in sample RB14_33-35 and SODUP04_010719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/11/2019 at 17:01 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (21.5%) and bis(2-chloroethoxy)methane (20.6%). The associated results in sample RB14_23-25 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/9/2019 at 11:44 exhibited a %D above the control limit for pentachlorophenol (23.2%). The associated results in sample SOFB03_010719 are qualified as "UJ" based on potential indeterminate bias.

L1900879

The field duplicate and parent sample (SODUP05_010819 and RB15_23-25) exhibited a RPD above the control limit for 2-methylnaphthalene (173%) and naphthalene (183%). The associated results are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 1/11/2019 at 7:54 exhibited a %D above the control limit for butyl benzyl phthalate (-35.2%). The associated results in sample RB10_0-2, RB10_18-20, RB15_0-2, and RB16_13-15 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/11/2019 at 11:59 exhibited a %D above the control limit for bis(2-chloroisopropyl)ether (22.7%). The associated results in sample RB16_18-20 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/13/2019 at 12:54 exhibited a %D above the control limit for benzoic acid (20.9%), 2,4-dinitrophenol (21.9%), pentachlorophenol (26.9%), and pentachlorophenol (26.9%). The associated results in sample RB15_18-20 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/14/2019 at 14:26 exhibited a %D above the control limit for p-chloro-m-cresol (-23.1%), dimethyl phthalate (-25.1%), acenaphthylene (-21.3%), and 4-nitrophenol (-32.7%). The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/14/2019 at 18:09 exhibited a %D above the control limit for benzo(b)fluoranthene (20.3%). The associated results in sample RB10_18-20 are qualified as "J" based on potential indeterminate bias.

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Herbicides by SW-846 Method 8151A

L1853111

The sample RB01_9-11 exhibited a percent recovery below the LCL for the surrogate DCAA (11%). The associated results are qualified as "UJ" based on potential low bias.

L1900156

The sample SODUP03_010219 exhibited a percent recovery below the LCL for the surrogate DCAA (0%, (0%). The associated results are qualified as "UJ" based on potential low bias.

L1900879

The CCV analyzed on 1/15/2019 at 12:43 exhibited a %D above the control limit for 2,4,5-t (-15.3%). The associated results in sample RB15_18-20, RB15_23-25, RB16_0-2, RB16_13-15, RB16_18-20, and SODUP05_010819 are qualified as "UJ" based on potential indeterminate bias.

PCBs by SW-846 Method 8082A

L1852926

The sample RB04_0-2 exhibited a dual column imprecision for Aroclor 1260. The associated results are qualified as "J" based on potential indeterminate bias.

L1853111

The sample RB12_8-9 exhibited a dual column imprecision for Aroclor 1260. The associated results are qualified as "J" based on potential indeterminate bias.

Pesticides by SW-846 Method 8081B

L1852610

The sample RB07_0-2 exhibited a dual column imprecision for cis-chlordane, dieldrin, endosulfan sulfate, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB07_8-10 exhibited a dual column imprecision for cis-chlordane and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB07_10-12 exhibited a dual column imprecision for 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

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L1852926

The sample SOFB01_122118 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (17%, 17%), decachlorobiphenyl (13%, 13%). The associated results are qualified as "UJ" based on potential low bias.

The sample RB05_0-2 exhibited a dual column imprecision for cis-chlordane and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB05_8-10 exhibited a dual column imprecision for trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB06_0-2 exhibited a dual column imprecision for 4,4'-DDD, cis-chlordane, heptachlor epoxide, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB06_8-10 exhibited a dual column imprecision for cis-chlordane and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB04_0-2 exhibited a dual column imprecision for 4,4'-DDD, heptachlor epoxide, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 12/28/2018 at 10:43 exhibited a %D above the control limit for chlordane. The associated results in sample RB05_0-2, RB05_8-10, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, and SODUP01_122118 are qualified as "UJ" based on potential indeterminate bias.

L1853111

The CCV analyzed on 1/4/2019 at 9:09 exhibited a %D above the control limit for toxaphene. The associated results in sample RB03_17-18 are qualified as "UJ" based on potential indeterminate bias.

L1853111

The sample RB02_10-12 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (254%). The associated results are qualified as "J" based on potential high bias.

The sample RB03_0-2 exhibited a dual column imprecision for endosulfan II and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

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The sample RB12_0-2 exhibited a dual column imprecision for endosulfan II and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB12_9-10 exhibited a dual column imprecision for endrin and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB01_0-2 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (183%). The associated results are qualified as "J" based on potential high bias.

The sample RB01_25-27 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1270%). The associated results are qualified as "J" based on potential high bias.

The sample RB01_0-2 exhibited a dual column imprecision for endosulfan II. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB08_0-2 exhibited a dual column imprecision for 4,4'-DDE, 4,4'-DDT, and cis-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 12/30/2018 at 15:29 exhibited a %D above the control limit for toxaphene. The associated results in sample RB03_0-2, RB03_2-3, RB12_0-2, RB12_9-10, RB12_10-12, and RB02_0-2 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/2/2019 at 9:37 exhibited a %D above the control limit for endosulfan sulfate (30.6%). The associated results in sample RB02_10-12 and RB02_13-15 are qualified as "UJ" based on potential indeterminate bias.

L1853234

The CCV analyzed on 1/2/2019 at 9:37 exhibited a %D above the control limit for endosulfan sulfate (30.6%). The associated results in sample SOFB02_122718 are qualified as "UJ" based on potential indeterminate bias.

L1900156

The LCS/LCSD for batch WG1194454 exhibited a RPD above the control limit for 4,4'-DDD (46%), 4,4'-DDE (37%), 4,4'-DDT (46%), aldrin (43%), alpha-BHC (49%), beta-BHC (36%), delta-BHC (44%), dieldrin (46%), endosulfan I (41%), endosulfan II (44%), endosulfan sulfate (36%), endrin (43%), endrin aldehyde (45%), endrin ketone (42%), heptachlor (44%), heptachlor epoxide (42%), lindane (44%), methoxychlor (47%), cis-chlordane (33%), and trans-chlordane (50%). The associated results in sample RB09_0-2, RB09_19-21, RB09_28-30, RB11_0-2, RB11_19-21,

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RB11_28-30, and SODUP03_010219 are qualified as "J" or "UJ" based on potential indeterminate bias.

L1900324

The sample RB21_0-2 exhibited a dual column imprecision for endosulfan II. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB21_18-20 exhibited a dual column imprecision for endosulfan II. The associated results are qualified as "J" based on potential indeterminate bias.

The sample RB22_3-5 exhibited a dual column imprecision for 4,4'-DDE. The associated results are qualified as "J" based on potential indeterminate bias.

L1900536

The sample RB17_4-6 exhibited a percent recovery below the LCL for the surrogate decachlorobiphenyl (29%). The associated results are qualified as "UJ" based on potential low bias.

The sample RB18_0-2 exhibited a dual column imprecision for trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

L1900707

The CCV analyzed on 1/10/2019 at 10:14 exhibited a %D above the control limit for toxaphene. The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 1/14/2019 at 16:33 exhibited a %D above the control limit for toxaphene. The associated results in sample RB14_23-25 are qualified as "UJ" based on potential indeterminate bias.

L1900879

The CCV analyzed on 1/10/2019 at 10:14 exhibited a %D above the control limit for toxaphene. The associated results in sample SOFB04_010819 are qualified as "UJ" based on potential indeterminate bias.

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Metals by SW-846 Method 6010D

L1852610

The laboratory duplicate and parent sample (RB07_0-2) exhibited a RPD above the control limit for zinc, total (28%). The associated results are qualified as "J" based on potential indeterminate bias.

The matrix spike (MS) for batch WG1192853 exhibited a percent recovery below the LCL for barium, total (18%) and lead, total (11%). The associated results in sample RB07_0-2, RB07_8-10, and RB07_10-12 are qualified as "J" based on potential low bias.

L1852926

The MB for batch WG1194043 exhibited a detection of copper, total (0.004 mg/l). The associated results in sample SOFB01_122118 are qualified as "U" at the reporting limit based on potential blank contamination.

The laboratory duplicate and parent sample (RB05_0-2) exhibited a RPD above the control limit for iron, total (22%). The associated results are qualified as "J" based on potential indeterminate bias.

The field duplicate and parent sample (SODUP01_122118 and RB04_8-10) exhibited a RPD above the control limit for lead, total (76%). The associated results are qualified as "J" based on potential indeterminate bias.

L1853111

The MS and matrix spike duplicate (MSD) for batch WG1193639 exhibited a percent recovery below the LCL for calcium, total (59%, 43%), lead, total (68%, 64%), potassium, total (126%), copper, total (71%), and zinc, total (72%). The associated results in sample RB01_0-2, RB01_14-15, RB01_25-27, RB08_0-2, RB08_10-12, RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "J" based on potential low bias.

The field duplicate and parent sample (SODUP02_122718 and RB08_14-16) exhibited a RPD above the control limit for calcium, total (66%). The associated results are qualified as "J" based on potential indeterminate bias.

L1853234

The MB for batch WG1194043 exhibited a detection of copper, total (0.004 mg/l). The associated results in sample SOFB02_122718 are qualified as "U" at the reporting limit based on potential blank contamination.

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L1900156

The MB for batch WG1194304 exhibited a detection of selenium, total (0.128 mg/kg). The associated results in sample RB09_0-2, RB09_19-21, RB09_28-30, RB11_0-2, RB11_19-21, and SODUP03_010219 are qualified as "U" at the reporting limit based on potential blank contamination.

The field duplicate and parent sample (SODUP03_010219 and RB09_19-21) exhibited a RPD above the control limit for barium, total (74%) and lead, total (111%). The associated results are qualified as "J" based on potential indeterminate bias.

L1900324

The MS/MSD for batch WG1194873 exhibited a RPD above the control limit for arsenic, total (34%). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, RB19_20-22, and RB19_24-25 are qualified as "J" based on potential indeterminate bias.

The MS/MSD for batch WG1194873 exhibited a percent recovery below the LCL for antimony, total (74%), chromium, total (74%), thallium, total (70%, 69%). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, RB19_20-22, and RB19_24-25 are qualified as "J" or "UJ" based on potential low bias.

The MS/MSD for batch WG1194873 exhibited a percent recovery above the UCL for potassium, total (138%). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, RB19_20-22, and RB19_24-25 are qualified as "J" based on potential high bias.

L1900536

The MS for batch WG1195822 exhibited a percent recovery below the LCL for arsenic, total (72%), barium, total (73%), and chromium, total (72%). The associated results in sample RB17_0-2, RB17_4-6, RB17_8-10, RB17_18-20, RB18_0-2, RB18_6-8, RB18_15-17, RB18_18-20, RB20_0-2, RB20_7-9, RB20_13-15, RB20_18-20, and RB22_20-22 are qualified as "J" or "UJ" based on potential low bias.

The laboratory duplicate and parent sample (RB17_0-2) exhibited a RPD above the control limit for arsenic, total (79%), cadmium, total (27%), calcium, total (37%), chromium, total (30%), copper, total (133%), iron, total (51%), magnesium, total (34%), nickel, total (25%), and potassium, total (24%). The associated results are qualified as "J" based on potential indeterminate bias.

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L1900707

The MB for batch WG1195823 exhibited a detection of selenium, total (0.128 mg/kg). The associated results in sample RB13_0-2, RB13_18-20, RB13_33-35, and RB14_0-2 are qualified as "U" at the reporting limit based on potential blank contamination.

The MSD for batch WG1196431 exhibited a percent recovery above the UCL for magnesium, total (163%), manganese, total (151%), and potassium, total (126%). The associated results in sample RB13_22-24 are qualified as "J" based on potential high bias.

L1900879

The MB for batch WG1196160 exhibited a detection of antimony, total (0.152 mg/kg). The associated results in sample RB10_0-2, RB10_18-20, and RB15_18-20 are qualified as "U" at the reporting limit based on potential blank contamination.

Mercury by SW-846 Method 7471B

L1852610

The MB for batch WG1192315 exhibited a detection of mercury, total (0.019 mg/kg). The associated results in sample RB07_0-2 and RB07_8-10 are qualified as "U" at the sample concentration based on potential blank contamination.

L1852926

The field duplicate and parent sample (SODUP01_122118 and RB04_8-10) exhibited a RPD above the control limit for mercury, total (79%). The associated results are qualified as "J" based on potential indeterminate bias.

L1853111

The field duplicate and parent sample (SODUP02_122718 and RB08_14-16) exhibited a RPD above the control limit for mercury, total (168%). The associated results are qualified as "J" based on potential indeterminate bias.

Cyanide by SW-846 Method 9012B

L1852610

The LCS/LCSD for batch WG1192409 exhibited a percent recovery below the LCL for cyanide, total (71%, 77%). The associated results in sample RB07_0-2, RB07_8-10, and RB07_10-12 are qualified as "UJ" based on potential low bias.

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L1852926

The LCS/LCSD for batch WG1192428 exhibited a percent recovery below the LCL for cyanide, total (73%, 78%). The associated results in sample RB05_0-2, RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, and RB04_0-2 are qualified as "J" or "UJ" based on potential low bias.

The LCSD for batch WG1192704 exhibited a percent recovery below the LCL for cyanide, total (72%). The associated results in sample RB04_8-10, RB04_13-15, SODUP01_122118, and RB04_18-20 are qualified as "J" or "UJ" based on potential low bias.

L1853110

The LCS/LCSD for batch WG1193398 exhibited a percent recovery below the LCL for cyanide, total (65%, 65%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential low bias.

L1853111

The LCS for batch WG1193065 exhibited a percent recovery below the LCL for cyanide, total (66%). The associated results in sample RB03_0-2, RB03_2-3, RB03_10-12, RB12_0-2, RB12_8-9, and RB12_9-10 are qualified as "J" or "UJ" based on potential low bias.

The LCS for batch WG1193067 exhibited a percent recovery below the LCL for cyanide, total (65%). The associated results in sample RB12_10-12, RB02_0-2, RB02_7-9, RB02_10-12, and RB02_13-15 are qualified as "J" or "UJ" based on potential low bias.

L1853234

The LCSD for batch WG1193512 exhibited a percent recovery below the LCL for cyanide, total (73%). The associated results in sample RB01_0-2, RB01_14-15, RB01_25-27, RB08_0-2, RB08_10-12, RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "J" or "UJ" based on potential low bias.

L1900156

The LCS/LCSD for batch WG1194383 exhibited a percent recovery below the LCL for cyanide, total (68%, 72%). The associated results in sample RB09_0-2, RB09_19-21, RB09_28-30, RB11_0-2, RB11_19-21, RB11_28-30, and SODUP03_010219 are qualified as "UJ" based on potential low bias.

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L1900324

The LCS/LCSD for batch WG1194787 exhibited a percent recovery below the LCL for cyanide, total (48%, 46%). The associated results in sample RB21_0-2, RB21_2-4, RB21_18-20, RB22_0-2, RB22_3-5, RB19_0-2, RB19_20-22, and RB19_24-25 are qualified as "J" or "UJ" based on potential low bias.

L1900536

The LCS for batch WG1195200 exhibited a percent recovery below the LCL for cyanide, total (79%). The associated results in sample RB17_0-2, RB17_4-6, RB17_8-10, and RB17_18-20 are qualified as "UJ" based on potential low bias.

The LCS/LCSD for batch WG1195222 exhibited a percent recovery below the LCL for cyanide, total (68%, 67%). The associated results in sample RB18_0-2, RB18_6-8, RB18_15-17, RB18_18-20, RB20_0-2, RB20_7-9, RB20_13-15, and RB22_20-22 are qualified as "J" or "UJ" based on potential low bias.

The LCS/LCSD for batch WG1195616 exhibited a percent recovery below the LCL for cyanide, total (60%, 62%). The associated results in sample RB20_18-20 are qualified as "UJ" based on potential low bias.

L1900707

The LCS/LCSD for batch WG1195617 exhibited a percent recovery below the LCL for cyanide, total (60%, 62%). The associated results in sample RB13_0-2, RB13_18-20, RB13_22-24, RB13_33-35, RB14_0-2, RB14_18-20, RB14_23-25, RB14_33-35, and SODUP04_010719 are qualified as "UJ" based on potential low bias.

L1900879

The LCS/LCSD for batch WG1196013 exhibited a percent recovery below the LCL for cyanide, total (50%, 75%). The associated results in sample RB10_0-2, RB10_18-20, RB10_33-35, RB15_0-2, RB15_18-20, RB15_23-25, RB16_0-2, RB16_13-15, RB16_18-20, and SODUP05_010819 are qualified as "J" or "UJ" based on potential low bias.

The LCS/LCSD for batch WG1196064 exhibited a RPD above the control limit for cyanide, total (39%). The associated results in sample RB15_28-30 are qualified as "UJ" based on potential indeterminate bias.

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Hexavalent Chromium by SW-846 Method 7196A

L1852926

The MS for batch WG1192810 exhibited a percent recovery below the LCL for chromium, hexavalent (0%). The associated results in sample RB05_0-2, RB05_8-10, RB05_13-15, RB05_19-21, RB06_0-2, RB06_8-10, RB06_10-12, RB04_0-2, RB04_8-10, and RB04_13-15 are qualified as "J" or "UJ" based on potential low bias.

L1853110

The MS for batch WG1193256 exhibited a percent recovery below the LCL for chromium, hexavalent (0%). The associated results in sample RB03_17-18 are qualified as "UJ" based on potential low bias.

L1853111

The MS for batch WG1193259 exhibited a percent recovery below the LCL for chromium, hexavalent (59%). The associated results in sample RB02_13-15 are qualified as "UJ" based on potential low bias.

The MS/MSD for batch WG1193635 exhibited a RPD above the control limit for chromium, hexavalent (3.3%). The associated results in sample RB01_0-2, RB01_14-15, RB01_25-27, RB08_0-2, RB08_10-12, RB08_12-14, RB08_14-16, SODUP02_122718, and RB01_9-11 are qualified as "UJ" based on potential indeterminate bias.

L1900879

The LCS for batch WG1196213 exhibited a percent recovery below the LCL for chromium, hexavalent (79%). The associated results in sample RB10_0-2, RB10_18-20, RB10_33-35, RB15_0-2, RB15_18-20, RB15_23-25, RB16_0-2, RB16_13-15, RB16_18-20, and SODUP05_010819 are qualified as "J" or "UJ" based on potential low bias.

The LCS for batch WG1196215 exhibited a percent recovery below the LCL for chromium, hexavalent (79%). The associated results in sample RB15_28-30 are qualified as "J" based on potential low bias.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

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VOCs by SW-846 Method 8260C

L1852610

The MB for batch WG1193693 exhibited a detection of bromomethane (0.95 ug/kg). The associated results are non-detections. No qualification is necessary.

The LCS/LCSD for batch WG1193693 exhibited a percent recovery above the UCL for bromomethane (158%, 153%) and chloromethane (134%). The associated results are non-detections. No qualification is necessary.

L1853111

The sample RB03_0-2 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (158%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB03_2-3 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (133%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB03_2-3 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (141%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB12_8-9 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB01_14-15 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

L1853234

The MB for batch WG1195020 exhibited a detection of bromomethane (0.9 ug/kg). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1195021 exhibited a detection of bromomethane (45 ug/kg). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1195241 exhibited a detection of bromomethane (0.62 ug/kg). The associated results are non-detections. No qualification is necessary.

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The LCS/LCSD for batch WG1194582 exhibited a percent recovery above the UCL for 2-butanone (140%, 140%). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1194141 exhibited a percent recovery below the LCL for 1,1,1,2-tetrachloroethane (51%, 51%), 1,1,2,2-tetrachloroethane (44%, 45%), 1,1,2-trichloroethane (55%, 56%), 1,2,3-trichlorobenzene (18%, 23%), 1,2,3-trichloropropane (48%, 49%), 1,2,4,5-tetramethylbenzene (32%, 35%), 1,2,4-trichlorobenzene (20%, 24%), 1,2,4-trimethylbenzene (44%, 42%), 1,2-dibromo-3-chloropropane (41%, 42%), 1,2-dibromoethane (46%, 46%), 1,2-dichlorobenzene (34%, 35%), 1,2-dichloroethane (59%, 61%), 1,2-dichloropropane (63%, 66%), 1,3,5-trimethylbenzene (48%, 45%), 1,3-dichlorobenzene (34%, 35%), 1,3-dichloropropane (52%, 53%), 1,4-dichlorobenzene (32%, 32%), 1,4-dioxane (57%, 54%), 2-butanone (62%, 61%), 2-hexanone (42%, 43%), 4-methyl-2-pentanone (48%, 49%), acetone (43%), acrylonitrile (47%, 47%), bromobenzene (41%, 41%), bromochloromethane (69%, 69%), bromodichloromethane (59%, 61%), bromoform (43%, 42%), carbon tetrachloride (62%), chlorobenzene (49%, 48%), dibromochloromethane (48%, 48%), dibromomethane (59%, 60%), ethylbenzene (54%, 52%), hexachlorobutadiene (28%, 32%), isopropylbenzene (53%, 52%), methylene chloride (65%, 69%), naphthalene (20%, 26%), styrene (27%, 30%), tetrachloroethene (61%, 64%), toluene (60%, 60%), trichloroethene (66%), vinyl acetate (19%, 21%), cis-1,2-dichloroethene (64%), cis-1,3-dichloropropene (43%, 44%), n-butylbenzene (38%, 36%), n-propylbenzene (48%, 45%), o-chlorotoluene (49%, 47%), o-xylene (53%, 50%), p-chlorotoluene (39%, 38%), 1,4-diethylbenzene (38%, 35%), 4-ethyltoluene (45%, 41%), p-isopropyltoluene (44%, 41%), p/m-xylene (53%, 50%), sec-butylbenzene (44%, 43%), tert-butylbenzene (49%, 48%), trans-1,2-dichloroethene (64%), trans-1,3-dichloropropene (36%, 37%), and trans-1,4-dichloro-2-butene (17%, 15%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

L1900156

The MB for batch WG1195272 exhibited a detection of bromomethane (39 ug/kg). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1195274 exhibited a detection of bromomethane (0.77 ug/kg). The associated results are non-detections. No qualification is necessary.

The TB (SOTB04_010219) exhibited a detection of acetone (2.1 ug/l). The associated results are non-detections. No qualification is necessary.

The LCS/LCSD for batch WG1194582 exhibited a percent recovery above the UCL for 2-butanone (140%, 140%). The associated results are non-detections. No qualification is necessary.

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The sample RB11_19-21 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (165%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample SODUP03_010219 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

L1900324

The MB for batch WG1195747 exhibited a detection of bromomethane (33 ug/kg). The associated results are non-detections. No qualification is necessary.

The LCS/LCSD for batch WG1195498 exhibited a percent recovery above the UCL for bromomethane (162%, 164%), chloromethane (149%, 149%), and vinyl chloride (138%, 138%). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1195498 exhibited a RPD above the control limit for 1,2,3-trichlorobenzene (48%), 1,2,4,5-tetramethylbenzene (66%), 1,2,4-trichlorobenzene (49%), 1,2,4-trimethylbenzene (53%), 1,2-dichlorobenzene (43%), 1,3,5-trimethylbenzene (49%), 1,3-dichlorobenzene (51%), 1,4-dichlorobenzene (68%), bromobenzene (37%), chlorobenzene (31%), ethylbenzene (35%), hexachlorobutadiene (40%), isopropylbenzene (44%), styrene (36%), n-butylbenzene (68%), n-propylbenzene (56%), o-chlorotoluene (47%), o-xylene (32%), p-chlorotoluene (54%), 1,4-diethylbenzene (68%), 4-ethyltoluene (57%), p-isopropyltoluene (62%), p/m-xylene (37%), sec-butylbenzene (54%), and tert-butylbenzene (46%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1195498 exhibited a percent recovery below the LCL for 1,1,2,2-tetrachloroethane (67%), 1,1-dichloroethene (57%, 58%), 1,2,3-trichloropropane (66%), carbon disulfide (54%), naphthalene (45%, 59%), and vinyl acetate (46%, 40%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1195498 exhibited a percent recovery above the UCL for bromomethane (161%), chloroethane (179%, 180%), chloromethane (166%, 176%), and dichlorodifluoromethane (179%, 186%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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L1900536

The LCS for batch WG1196197 exhibited a percent recovery above the UCL for chloromethane (131%). The associated results are non-detections. No qualification is necessary.

The sample RB18_6-8 exhibited a percent recovery below the LCL for the surrogate 2,4,6-tribromophenol (0%) and 2,4,6-tribromophenol (0%). The other two acid extractable surrogates were recovered within the control limits. No qualification is necessary.

L1900707

The MB for batch WG1196396 exhibited a detection of bromomethane (0.91 ug/kg). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1196507 exhibited a detection of bromomethane (46 ug/kg). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1195621 exhibited a percent recovery above the UCL for 1,2,4,5-tetrachlorobenzene (120%), 1,2,4-trichlorobenzene (110%), biphenyl (120%, 110%), bis(2-chloroethoxy)methane (120%), hexachloroethane (180%, 180%), n-nitrosodi-n-propylamine (130%, 130%), and p-chloro-m-cresol (120%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1196507 exhibited a percent recovery above the UCL for 1,1,2-trichloroethane (347%, 294%), 4-methyl-2-pentanone (137%, 132%), and acrylonitrile (148%, 137%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1196507 exhibited a percent recovery below the LCL for 1,2,4,5-tetramethylbenzene (58%, 39%), 1,3,5-trimethylbenzene (61%), 1,4-dichlorobenzene (68%), hexachlorobutadiene (62%, 56%), isopropylbenzene (62%), n-butylbenzene (55%, 37%), n-propylbenzene (55%, 24%), 1,4-diethylbenzene (69%, 53%), 4-ethyltoluene (58%), p-isopropyltoluene (60%), and sec-butylbenzene (62%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

The MS/MSD for batch WG1196507 exhibited a RPD above the control limit for 2-butanone (62%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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The sample RB13_22-24 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB14_18-20 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (149%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample RB14_23-25 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (131%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample SODUP04_010719 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (147%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

L1900879

The MS/MSD for batch WG1196736 exhibited a percent recovery below the LCL for 1,2,3-trichlorobenzene (68%, 62%), 1,2,4,5-tetramethylbenzene (61%), 1,2,4-trichlorobenzene (67%, 60%), 1,2,4-trimethylbenzene (69%), 1,3-dichlorobenzene (69%), 1,4-dichlorobenzene (65%), 2-butanone (66%, 65%), 2-hexanone (63%, 61%), 4-methyl-2-pentanone (69%), hexachlorobutadiene (51%), naphthalene (69%, 66%), n-butylbenzene (59%), p-chlorotoluene (67%), 1,4-diethylbenzene (59%), 4-ethyltoluene (69%), p-isopropyltoluene (66%), and trans-1,4-dichloro-2-butene (68%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

SVOCs by SW-846 Method 8270D and 8270C-SIM

L1852926

The MB for batch WG1192883 exhibited a detection of anthracene (0.01 ug/l). The associated results are non-detections. No qualification is necessary.

L1853111

The MS/MSD for batch WG1193399 exhibited a percent recovery below the LCL for 2,4-dinitrophenol (0%), 4,6-dinitro-o-cresol (9.2%, 6.4%), and benzoic acid (0%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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L1853234

The MB for batch WG1194717 exhibited a detection of 2-methylnaphthalene (0.07 ug/l), acenaphthene (0.02 ug/l), and naphthalene (0.22 ug/l). The associated results are non-detections. No qualification is necessary.

L1900156

The LCS/LCSD for batch WG1194535 exhibited a percent recovery above the UCL for phenol (94%, 98%) and p-chloro-m-cresol (110%, 117%). The associated results are non-detections. No qualification is necessary.

L1900324

The MS/MSD for batch WG1194798 exhibited a percent recovery below the LCL for benzoic acid (0%) and hexachlorocyclopentadiene (20%, 22%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

L1900536

The LCS/LCSD for batch WG1195147 exhibited a percent recovery above the UCL for 2,4-dinitrophenol (135%), benzoic acid (122%, 125%), and pentachlorophenol (112%). The associated results are non-detections. No qualification is necessary.

The LCS for batch WG1196046 exhibited a percent recovery above the UCL for o-chlorotoluene (132%). The associated results are non-detections. No qualification is necessary.

The sample RB18_6-8 exhibited a percent recovery below the LCL for the surrogate 2-fluorophenol (6%) and 2-fluorophenol (11%). The other two acid extractable surrogates were recovered within the control limits. No qualification is necessary.

L1900707

The MB for batch WG1195689 exhibited a detection of benzo(k)fluoranthene (0.01 ug/l), chrysene (0.01 ug/l), fluoranthene (0.02 ug/l), phenanthrene (0.03 ug/l), and pyrene (0.02 ug/l). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1195621 exhibited a percent recovery below the LCL for 2,4-dinitrophenol (0%), 2-methylnaphthalene (0%), 4,6-dinitro-o-cresol (0%), acetophenone (0%), benzoic acid (0%), naphthalene (0%), nitrobenzene (39%), and phenol (96%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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The sample RB13_22-24 exhibited a percent recovery above the UCL for the surrogate nitrobenzene-d5 (239%). The other two base/neutral surrogates were recovered within the control limits. No qualification is necessary.

The sample RB14_23-25 exhibited a percent recovery above the UCL for the surrogate nitrobenzene-d5 (268%). The other two base/neutral surrogates were recovered within the control limits. No qualification is necessary.

L1900879

The LCS for batch WG1196086 exhibited a percent recovery above the UCL for 1,4-dioxane (170%). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1196039-4 exhibited a percent recovery below the LCL for benzoic acid (0%) and 4-chloroaniline (39%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

Herbicides by SW-846 Method 8151A

L1852926

The sample RB04_13-15 exhibited a percent recovery above the UCL for the surrogate DCAA (159%). The associated results are non-detections. No qualification is necessary.

L1853111

The sample RB03_10-12 exhibited a percent recovery above the UCL for the surrogate DCAA (199%). The associated results are non-detections. No qualification is necessary.

The sample RB02_7-9 exhibited a percent recovery below the LCL for the surrogate DCAA (0%, 0%). The sample was diluted >10X. No qualification is necessary.

L1900156

The sample RB09_19-21 exhibited a percent recovery above the UCL for the surrogate DCAA (187%). The associated results are non-detections. No qualification is necessary.

PCBs by SW-846 Method 8082A

L1900707

The MS/MSD for batch WG1195268 exhibited a percent recovery below the LCL for Aroclor 1016 (37.1%, 37.6%) and Aroclor 1260 (39.7%, 38.4%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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Pesticides by SW-846 Method 8081B

L1852926

The MB for batch WG1193824 exhibited a detection of 4,4'-DDT (0.025 ug/l). The associated results are non-detections. No qualification is necessary.

The sample RB05_13-15 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 1%), decachlorobiphenyl (2%, 3%). The sample was diluted >10X. No qualification is necessary.

The sample RB05_19-21 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (4%, 5%), decachlorobiphenyl (6%, 7%). The sample was diluted >10X. No qualification is necessary.

The sample RB04_13-15 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (8%, 9%), decachlorobiphenyl (10%, 11%). The sample was diluted >10X. No qualification is necessary.

The sample RB04_18-20 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 1%), decachlorobiphenyl (2%, 3%). The sample was diluted >10X. No qualification is necessary.

L1853110

The sample RB03_17-18 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1%, 2%), decachlorobiphenyl (3%, 4%). The sample was diluted >10X. No qualification is necessary.

L1853111

The sample RB03_10-12 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

The sample RB12_8-9 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

The sample RB12_10-12 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (322%). The associated results are non-detections. No qualification is necessary.

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The sample RB02_13-15 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (3520%). The associated results are non-detections. No qualification is necessary.

The sample RB01_14-15 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (7680%) and decachlorobiphenyl (242%). The sample was diluted >10X. No qualification is necessary.

The sample RB08_14-16 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1610%). The associated results are non-detections. No qualification is necessary.

The sample SODUP02_122718 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1270%). The associated results are non-detections. No qualification is necessary.

The sample RB01_9-11 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

L1853234

The MB for batch WG1193824 exhibited a detection of 4,4'-DDT (0.025 ug/l). The associated results are non-detections. No qualification is necessary.

L1900156

The sample RB09_19-21 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (204%). The associated results are non-detections. No qualification is necessary.

The sample RB11_19-21 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

The sample SODUP03_010219 exhibited a percent recovery below the LCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (0%, 0%), decachlorobiphenyl (0%, 0%). The sample was diluted >10X. No qualification is necessary.

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L1900324

The sample RB19_20-22 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (1650%). The associated results are non-detections. No qualification is necessary.

The sample RB19_24-25 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (5140%). The associated results are non-detections. No qualification is necessary.

L1900536

The sample RB17_18-20 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (334%). The associated results are non-detections. No qualification is necessary.

The sample RB18_6-8 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (284%, 173%), and decachlorobiphenyl (218%). The associated results are non-detections. No qualification is necessary.

The sample RB20_0-2 exhibited a percent recovery below the LCL for the surrogate decachlorobiphenyl (27%). The other column surrogates were recovered within the control limits. No qualification is necessary.

L1900707

The sample RB13_22-24 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (642%). The associated results are non-detections. No qualification is necessary.

The sample RB14_23-25 exhibited a percent recovery above the UCL for the surrogate decachlorobiphenyl (155%). The associated results are non-detections. No qualification is necessary.

The sample RB14_23-25 exhibited a percent recovery above the UCL for the surrogate 2,4,5,6-tetrachloro-m-xylene (152%) and decachlorobiphenyl (160%). The associated results are non-detections. No qualification is necessary.

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Metals by SW-846 Method 6010D

L1852610

The MB for batch WG1192853 exhibited a detection of iron, total (0.428 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The MS for batch WG1192853 exhibited a percent recovery above the UCL for calcium, total (1380%), and iron, total (686%), magnesium, total (127%), and manganese, total (190%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1852926

The MB for batch WG1193229 exhibited a detection of iron, total (0.672 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The field blank (FB) (SOFB01_122118) exhibited a detection of barium, total (0.002 mg/l) and copper, total (0.003 mg/l). The associated results are non-detections. No qualification is necessary.

The MS for batch WG1193229 exhibited a percent recovery below the LCL for aluminum, total (23%), iron, total (0%), and magnesium, total (72%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS for batch WG1193229 exhibited a percent recovery above the UCL for barium, total (320%), calcium, total (988%), lead, total (1700%), manganese, total (163%), and zinc, total (474%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1853110

The MB for batch WG1193639 exhibited a detection of sodium, total (1.49 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

L1853111

The MB for batch WG1193234 exhibited a detection of chromium, total (0.144 mg/kg), iron, total (1.26 mg/kg), manganese, total (0.088 mg/kg), and sodium, total (1.42 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The MS/MSD for batch WG1193639 exhibited a percent recovery above the UCL for aluminum, total (566%, 304%) and iron, total (1510%, 836%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

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The MS/MSD for batch WG1193639 exhibited a percent recovery below the LCL for manganese, total (56%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1853234

The MB for batch WG1193639 exhibited a detection of sodium, total (1.49 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The FB (SOFB02_122718) exhibited a detection of barium, total (0.002 mg/l), chromium, total (0.003 mg/l), copper, total (0.005 mg/l), acetone (1.6 ug/l), benzo(ghi)perylene (0.04 ug/l), dibenzo(a,h)anthracene (0.03 ug/l), and indeno(1,2,3-cd)pyrene (0.03 ug/l). The associated results are non-detections. No qualification is necessary.

L1900156

The MB for batch WG1194304 exhibited a detection of aluminum, total (1.4 mg/kg), iron, total (1.63 mg/kg), magnesium, total (1.31 mg/kg), and manganese, total (0.152 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

L1900324

The MS/MSD for batch WG1194873 exhibited a RPD above the control limit for iron, total (55%) and magnesium, total (31%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1194873 exhibited a percent recovery below the LCL for aluminum, total (0%), copper, total (63%), lead, total (22%), zinc, total (60%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1194873 exhibited a percent recovery above the UCL for calcium, total (2580%, 2410%) and manganese, total (200%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1900536

The MB for batch WG1195822 exhibited a detection of copper, total (0.268 mg/kg) and iron, total (0.488 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The MS for batch WG1195822 exhibited a percent recovery below the LCL for aluminum, total (18%), calcium, total (0%), iron, total (0%), lead, total (0%), magnesium, total (59%), and zinc,

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total (0%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS for batch WG1195822 exhibited a percent recovery above the UCL for copper, total (743%) and manganese, total (158%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1900707

The MB for batch WG1195823 exhibited a detection of sodium, total (1.64 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The MS/MSD for batch WG1196431 exhibited a RPD above the control limit for aluminum, total (39%) and iron, total (25%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

L1900879

The MB for batch WG1196160 exhibited a detection of iron, total (1.26 mg/kg), manganese, total (0.396 mg/kg), and nickel, total (0.32 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The FB (SOFB04_010819) exhibited a detection of barium, total (0.002 mg/l) and calcium, total (0.058 mg/l). The associated results are non-detections. No qualification is necessary.

The MS/MSD for batch WG1196160 exhibited a percent recovery above the UCL for aluminum, total (214%, 190%) and iron, total (53%, 349%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1196160 exhibited a percent recovery above the UCL for aluminum, total (197%, 296%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1196160 exhibited a percent recovery below the LCL for iron, total (0%), manganese, total (0%), and thallium, total (73%, 73%). The associated results in the parent sample are >4X the spiked amount. No qualification is necessary.

The MS/MSD for batch WG1196736 exhibited a percent recovery above the UCL for chloroethane (152%) and vinyl chloride (142%, 138%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

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The MS/MSD for batch WG1196778-12 exhibited a RPD above the control limit for 1,1,1,2-tetrachloroethane (34%), 1,1,1-trichloroethane (31%), 1,1,2,2-tetrachloroethane (37%), 1,1-dichloropropene (33%), 1,2,3-trichlorobenzene (49%), 1,2,3-trichloropropane (38%), 1,2,4,5-tetramethylbenzene (48%), 1,2,4-trichlorobenzene (68%), 1,2,4-trimethylbenzene (51%), 1,2-dibromo-3-chloropropane (40%), 1,2-dibromoethane (38%), 1,2-dichlorobenzene (47%), 1,2-dichloroethane (37%), 1,2-dichloropropane (34%), 1,3,5-trimethylbenzene (50%), 1,3-dichlorobenzene (50%), 1,3-dichloropropane (35%), 1,4-dichlorobenzene (50%), 1,4-dioxane (64%), 2,2-dichloropropane (31%), 2-butanone (37%), 2-hexanone (40%), 4-methyl-2-pentanone (40%), acetone (47%), acrylonitrile (38%), benzene (33%), bromobenzene (41%), bromochloromethane (35%), bromodichloromethane (36%), bromoform (37%), carbon disulfide (31%), carbon tetrachloride (32%), chlorobenzene (39%), chloroethane (31%), chloroform (32%), dibromochloromethane (36%), dibromomethane (38%), ethyl ether (35%), ethylbenzene (42%), hexachlorobutadiene (62%), isopropylbenzene (34%), methyl tert butyl ether (36%), methylene chloride (32%), naphthalene (44%), styrene (43%), tetrachloroethene (38%), toluene (34%), trichloroethene (35%), vinyl acetate (38%), cis-1,2-dichloroethene (31%), cis-1,3-dichloropropene (37%), n-butylbenzene (62%), n-propylbenzene (40%), o-chlorotoluene (47%), o-xylene (42%), p-chlorotoluene (50%), 1,4-diethylbenzene (67%), 4-ethyltoluene (54%), p-isopropyltoluene (58%), p/m-xylene (44%), sec-butylbenzene (54%), tert-butylbenzene (50%), trans-1,2-dichloroethene (31%), trans-1,3-dichloropropene (35%), and trans-1,4-dichloro-2-butene (39%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

Cyanide by SW-846 Method 9012B

L1900879

The MS/MSD for batch WG1196064-5 exhibited a RPD above the control limit for cyanide, total (39%). Organic results are not qualified on the basis of MS/MSDs alone. No qualification is necessary.

COMMENTS:

Field duplicate and parent sample pairs were collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 2X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 50% for soil. The following analytes did not meet the precision criteria:

- SODUP01_122118, parent RB04_8-10: lead, zinc, mercury
- SODUP02_122718, parent RB08_14-16 acetone, calcium, mercury

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- SODUP03_010219, parent RB09_19-21: 1,2,4,5-tetramethylbenzene, 1,4-diethylbenzene, 2-methylnaphthalene, barium, benzene, fluoranthene, isopropylbenzene, lead, naphthalene, n-butylbenzene, n-propylbenzene, phenanthrene, pyrene, sec-butylbenzene
- SODUP04_010719, parent RB14_23-25: 1,2,4,5-tetramethylbenzene, 1,3,5-trimethylbenzene, 1,4-diethylbenzene, 2-methylnaphthalene, ethylbenzene, isopropylbenzene, manganese, naphthalene, n-butylbenzene, n-propylbenzene, p-isopropyltoluene, sec-butylbenzene
- SODUP05_010819, parent RB15_23-25: 2-methylnaphthalene, benzene, naphthalene, n-propylbenzene

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 28, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Soil Samples Collected in September 2017
Langan Project No.: 170487001

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil samples collected in September 2017 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, metals, mercury (Hg), and percent solids (%S) by the methods specified below.

- VOCs by SW-846 Method 8260C
- SVOCs by SW-846 Method 8270D and 8270C-SIM
- PCBs by SW-846 Method 8082A
- Pesticides by SW-846 Method 8081B
- Metals by SW-846 Method 6010C
- Mercury by SW-846 Method 7471B
- Percent Solids by Standard Method 2540G

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

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TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1731144	L1731144-01	SB09_0-2	9/5/2017	VOCs, SVOCs, Metals, Hg, %S
L1731144	L1731144-02	SOTB01_090517	9/5/2017	VOCs
L1731335	L1731335-01	SB04_6-7	9/5/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-02	SB08_23-24	9/5/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-03	SB08_0-2	9/5/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-04	SB07_0-2	9/5/2017	VOCs, SVOCs, PCBs, Pesticides, Metals, Hg, %S
L1731335	L1731335-05	FB01_090617	9/6/2017	VOCs, SVOCs, Metals, Hg
L1731335	L1731335-06	TB02_090617	9/6/2017	VOCs
L1731335	L1731335-07	SB06_23-23.5	9/6/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-08	SB06_11-12	9/6/2017	VOCs, SVOCs, Metals, Hg, %S
L1731335	L1731335-09	SB05_6-7	9/6/2017	VOCs, SVOCs, PCBs, Pesticides, Metals, Hg, %S
L1731603	L1731603-01	FB02_090717	9/7/2017	VOCs, SVOCs, PCBs, Pesticides, Metals, Hg
L1731603	L1731603-02	SB01_11.5-12	9/7/2017	VOCs, SVOCs, Metals, Hg, %S
L1731603	L1731603-03	SB02_6-7	9/7/2017	VOCs, SVOCs, PCBs, Pesticides, Metals, Hg, %S
L1731603	L1731603-04	SB03_18-19	9/7/2017	VOCs, SVOCs, Metals, Hg, %S
L1731603	L1731603-05	SB04_6-7	9/7/2017	Metals, Hg, %S
L1731603	L1731603-07	TB03_090717	9/7/2017	VOCs
L1734010	L1734010-01	SB11_19.5-20	9/22/2017	VOCs, %S
L1734010	L1734010-02	SB12_18-19	9/22/2017	VOCs, %S
L1734010	L1734010-03	SB13_18-19	9/22/2017	VOCs, %S

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-37A, "Polychlorinated Biphenyl (PCB) Aroclor Data Validation" (June 2015, Revision 0), USEPA Region II SOP #HW-36A, "Pesticide Data Validation"

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(October 2016, Revision 1), USEPA Region II SOP #HW-3a, "ICP-AES Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-3c, "Mercury and Cyanide Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, sample extraction and digestion, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, serial dilutions, dual column performance, field duplicate, and field blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

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TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
FB01_090617	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
FB01_090617	SW8260C	123-91-1	1,4-DIOXANE	UJ
FB01_090617	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
FB01_090617	SW8270D	95-95-4	2,4,5-TRICHLOROPHENOL	UJ
FB01_090617	SW8260C	75-15-0	CARBON DISULFIDE	UJ
FB01_090617	SW8260C	74-87-3	CHLOROMETHANE	UJ
FB01_090617	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.001)
FB01_090617	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB01_090617	SW8260C	91-20-3	NAPHTHALENE	UJ
FB01_090617	SW8270D	59-50-7	P-CHLORO-M-CRESOL	UJ
FB01_090617	6020A	7440-23-5	SODIUM, TOTAL	U (0.245)
SB04_6-7	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB04_6-7	SW8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
SB04_6-7	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB04_6-7	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SB04_6-7	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SB04_6-7	SW8270D	99-09-2	3-NITROANILINE	UJ
SB04_6-7	SW8270D	100-01-6	4-NITROANILINE	UJ
SB04_6-7	SW8270D	65-85-0	BENZOIC ACID	UJ
SB04_6-7	SW8270D	84-74-2	DI-N-BUTYLPHTHALATE	UJ
SB04_6-7	SW8260C	60-29-7	ETHYL ETHER	UJ
SB04_6-7	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
SB04_6-7	SW8260C	75-01-4	VINYL CHLORIDE	UJ
SB05_6-7	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
SB05_6-7	SW8270D	91-94-1	3,3'-DICHLOROBENZIDINE	UJ
SB05_6-7	SW8270D	65-85-0	BENZOIC ACID	UJ
SB05_6-7	SW8260C	75-00-3	CHLOROETHANE	UJ
SB05_6-7	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
SB05_6-7	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
SB05_6-7	SW8260C	91-20-3	NAPHTHALENE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
SB05_6-7	SW8260C	108-05-4	VINYL ACETATE	UJ
SB06_23-23.5	SW8260C	79-34-5	1,1,2,2-TETRACHLOROETHANE	UJ
SB06_23-23.5	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SB06_23-23.5	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SB06_23-23.5	SW8270D	99-09-2	3-NITROANILINE	UJ
SB06_23-23.5	SW8270D	100-01-6	4-NITROANILINE	UJ
SB06_23-23.5	SW8270D	100-02-7	4-NITROPHENOL	UJ
SB06_23-23.5	SW8270D	65-85-0	BENZOIC ACID	UJ
SB06_23-23.5	SW8270D	84-74-2	DI-N-BUTYLPHTHALATE	UJ
SB06_23-23.5	SW8270D	77-47-4	HEXACHLOROCYCLOPENTADIENE	UJ
SB06_23-23.5	SW8260C	104-51-8	N-BUTYLBENZENE	J
SB06_23-23.5	SW8270D	87-86-5	PENTACHLOROPHENOL	UJ
SB06_23-23.5	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SB07_0-2	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB07_0-2	SW8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
SB07_0-2	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB07_0-2	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SB07_0-2	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SB07_0-2	SW8270D	99-09-2	3-NITROANILINE	UJ
SB07_0-2	SW8270D	100-01-6	4-NITROANILINE	UJ
SB07_0-2	SW8270D	65-85-0	BENZOIC ACID	UJ
SB07_0-2	SW8270D	84-74-2	DI-N-BUTYLPHTHALATE	UJ
SB07_0-2	SW8081B	33213-65-9	ENDOSULFAN II	J
SB07_0-2	SW8260C	60-29-7	ETHYL ETHER	UJ
SB07_0-2	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	J
SB07_0-2	SW8260C	75-01-4	VINYL CHLORIDE	UJ
SB08_23-24	SW8260C	79-34-5	1,1,2,2-TETRACHLOROETHANE	UJ
SB08_23-24	SW8270D	105-67-9	2,4-DIMETHYLPHENOL	UJ
SB08_23-24	SW8270D	121-14-2	2,4-DINITROTOLUENE	UJ
SB08_23-24	SW8270D	99-09-2	3-NITROANILINE	UJ
SB08_23-24	SW8270D	100-01-6	4-NITROANILINE	UJ
SB08_23-24	SW8270D	65-85-0	BENZOIC ACID	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
SB08_23-24	SW8270D	84-74-2	DI-N-BUTYLPHthalate	UJ
SB08_23-24	SW8260C	104-51-8	N-BUTYLBENZENE	J
SB08_23-24	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
TB02_090617	SW8260C	79-34-5	1,1,2,2-TETRACHLOROETHANE	UJ
TB02_090617	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
TB02_090617	SW8260C	95-63-6	1,2,4-TRIMETHYLBENZENE	UJ
TB02_090617	SW8260C	123-91-1	1,4-DIOXANE	R
TB02_090617	SW8260C	78-93-3	2-BUTANONE	R
TB02_090617	SW8260C	591-78-6	2-HEXANONE	R
TB02_090617	SW8260C	108-10-1	4-METHYL-2-PENTANONE	R
TB02_090617	SW8260C	67-64-1	ACETONE	R
TB02_090617	SW8260C	107-13-1	ACRYLONITRILE	R
TB02_090617	SW8260C	74-83-9	BROMOMETHANE	UJ
TB02_090617	SW8260C	75-15-0	CARBON DISULFIDE	UJ
TB02_090617	SW8260C	74-87-3	CHLOROMETHANE	UJ
TB02_090617	SW8260C	100-42-5	STYRENE	UJ
TB02_090617	SW8260C	98-06-6	TERT-BUTYLBENZENE	UJ
TB02_090617	SW8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
TB02_090617	SW8260C	110-57-6	TRANS-1,4-DICHLORO-2-BUTENE	UJ
TB02_090617	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SB09_0-2	SW8270D	92-52-4	BIPHENYL	UJ
SOTB01_090517	SW8260C	123-91-1	1,4-DIOXANE	UJ
FB02_090717	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
FB02_090717	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
FB02_090717	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
FB02_090717	SW8260C	123-91-1	1,4-DIOXANE	UJ
FB02_090717	SW8260C	591-78-6	2-HEXANONE	UJ
FB02_090717	SW8270D	88-75-5	2-NITROPHENOL	UJ
FB02_090717	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
FB02_090717	SW8270D	117-81-7	BIS(2-ETHYLHEXYL)PHthalate	UJ
FB02_090717	SW8260C	74-83-9	BROMOMETHANE	UJ
FB02_090717	SW8260C	75-00-3	CHLOROETHANE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
FB02_090717	6020A	7440-47-3	CHROMIUM, TOTAL	U (0.001)
FB02_090717	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
FB02_090717	SW8260C	91-20-3	NAPHTHALENE	UJ
FB02_090717	SW8260C	127-18-4	TETRACHLOROETHENE	UJ
FB02_090717	SW8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
FB02_090717	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
MW01_090717	SW8260C	630-20-6	1,1,1,2-TETRACHLOROETHANE	UJ
MW01_090717	SW8260C	71-55-6	1,1,1-TRICHLOROETHANE	UJ
MW01_090717	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
MW01_090717	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
MW01_090717	SW8270D	88-75-5	2-NITROPHENOL	UJ
MW01_090717	SW8260C	67-64-1	ACETONE	UJ
MW01_090717	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
MW01_090717	6020A	7440-36-0	ANTIMONY, TOTAL	U (0.004)
MW01_090717	SW8260C	75-27-4	BROMODICHLOROMETHANE	UJ
MW01_090717	SW8260C	75-25-2	BROMOFORM	UJ
MW01_090717	SW8260C	74-83-9	BROMOMETHANE	UJ
MW01_090717	SW8260C	56-23-5	CARBON TETRACHLORIDE	UJ
MW01_090717	6020A	7440-50-8	COPPER, DISSOLVED	J
MW01_090717	SW8260C	87-68-3	HEXACHLOROBUTADIENE	UJ
MW01_090717	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
MW01_090717	SW8260C	127-18-4	TETRACHLOROETHENE	J
MW01_090717	SW8260C	10061-02-6	TRANS-1,3-DICHLOROPROPENE	UJ
MW01_090717	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
MW01_090717 (LAB FILTER)	6020A	7440-36-0	ANTIMONY, DISSOLVED	U (0.004)
SB02_6-7	SW8081B	72-55-9	4,4'-DDE	J
SB02_6-7	SW8081B	57-74-9	CHLORDANE	J
SB02_6-7	SW8081B	76-44-8	HEPTACHLOR	J
SB02_6-7	SW8081B	5103-74-2	TRANS-CHLORDANE	J
SB03_18-19	SW8260C	67-64-1	ACETONE	J
TB03_090717	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
TB03_090717	SW8260C	123-91-1	1,4-DIOXANE	UJ
TB03_090717	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SB11_19.5-20	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB11_19.5-20	SW8260C	78-87-5	1,2-DICHLOROPROPANE	UJ
SB11_19.5-20	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB11_19.5-20	SW8260C	591-78-6	2-HEXANONE	UJ
SB11_19.5-20	SW8260C	74-97-5	BROMOCHLOROMETHANE	UJ
SB11_19.5-20	SW8260C	74-83-9	BROMOMETHANE	U (140)
SB11_19.5-20	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SB11_19.5-20	SW8260C	60-29-7	ETHYL ETHER	UJ
SB11_19.5-20	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
SB11_19.5-20	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SB12_18-19	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB12_18-19	SW8260C	78-87-5	1,2-DICHLOROPROPANE	UJ
SB12_18-19	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB12_18-19	SW8260C	591-78-6	2-HEXANONE	UJ
SB12_18-19	SW8260C	74-97-5	BROMOCHLOROMETHANE	UJ
SB12_18-19	SW8260C	74-83-9	BROMOMETHANE	U (170)
SB12_18-19	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SB12_18-19	SW8260C	60-29-7	ETHYL ETHER	UJ
SB12_18-19	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	J
SB12_18-19	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
SB13_18-19	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
SB13_18-19	SW8260C	78-87-5	1,2-DICHLOROPROPANE	UJ
SB13_18-19	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
SB13_18-19	SW8260C	591-78-6	2-HEXANONE	UJ
SB13_18-19	SW8260C	74-97-5	BROMOCHLOROMETHANE	UJ
SB13_18-19	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
SB13_18-19	SW8260C	60-29-7	ETHYL ETHER	UJ
SB13_18-19	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
SB13_18-19	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ

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MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. The section below describes the major deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731335:

The initial calibration for VOA122 exhibited response factors below the minimum response factor for 1,4-dioxane (0.000), 2-butanone (0.046), 2-hexanone (0.086), 4-methyl-2-pentanone (0.059), acetone (0.031), and acrylonitrile (0.044). The associated results in sample TB02_090617 are rejected.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731144:

The continuing calibration verification (CCV) analyzed on 9/9/2017 at 11:40 exhibited a percent difference (%D) above the control limit for 1,4-dioxane (-36.8%). The associated results in sample SOTB01_090517 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 7:34 exhibited %Ds above the control limit for vinyl chloride (-23.8%), ethyl ether (-21.7%), methyl tert butyl ether (-31.2%), 1,1-dichloroethane (-20.6%), ethyl tert-butyl ether (-67.8%), and 2,2-dichloropropane (-22.6%), and 1,1-dichloropropene (-21.2%). The associated results in sample SB09_0-2 are qualified as "UJ" based on potential indeterminate bias.

L1731335:

The laboratory control sample (LCS) for batch WG1040719 exhibited a percent recovery above the upper control limit (UCL) for methyl tert butyl ether (131%). The associated results in sample SB07_0-2 are qualified as "J" based on potential high bias.

The lab control sample and duplicate (LCS/LCSD) for batch WG1040944 exhibited a percent recovery below the lower control limit (LCL) for chloromethane (35%, 36%). The associated results in sample FB01_090617 are qualified as "UJ" based on potential low bias.

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The LCS/LCSD for batch WG1041054 exhibited a percent recovery below the LCL for styrene (65%, 65%). The associated results in sample TB02_090617 are qualified as "UJ" based on potential low bias.

The CCV analyzed on 9/12/2017 at 7:09 exhibited %Ds above the control limit for trichlorofluoromethane (-22%), and 1,1,2,2-tetrachloroethane (-22.1%), and n-butylbenzene (-21.9%). The associated results in samples SB08_23-24 and SB06_23-23.5 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 7:34 exhibited %Ds above the control limit for vinyl chloride (-23.8%), ethyl ether (-21.7%), methyl tert butyl ether (-31.2%), 1,1-dichloroethane (-20.6%), and 2,2-dichloropropane (-22.6%), and 1,1-dichloropropene (-21.2%). The associated results in samples SB04_6-7 and SB07_0-2 are qualified as "J" or "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 7:44 exhibited %Ds above the control limit for dichlorodifluoromethane (29.7%), chloromethane (64.7%), carbon disulfide (36.3%), 2,2-dichloropropane (-44.2%), 1,4-dioxane (-24.5%), and naphthalene (-22.1%), and 1,2,3-trichlorobenzene (-44.7%). The associated results in sample FB01_090617 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 18:39 exhibited %Ds above the control limit for chloromethane (28.9%), bromomethane (32.1%), trichlorofluoromethane (21.6%), 1,1-dichloroethene (25.5%), carbon disulfide (21.3%), trans-1,2-dichloroethene (20.7%), styrene (36.7%), 1,1,2,2-tetrachloroethane (-20.7%), trans-1,4-dichloro-2-butene (-20.5%), and tert-butylbenzene (-27.1%), and 1,2,4-trimethylbenzene (-28.8%). The associated results in sample TB02_090617 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 8:10 exhibited %Ds above the control limit for chloroethane (-32.5%), methyl tert-butyl ether (-85.5%), vinyl acetate (-22%), and 1,2-dibromo-3-chloropropane (25.2%), and naphthalene (23.1%). The associated results in sample SB05_6-7 are qualified as "UJ" based on potential indeterminate bias.

L1731603:

The LCS/LCSD for batch WG1041384 exhibited a relative percent difference (RPD) above the control limit for 1,4-dioxane (22%). The associated result in sample TB03_090717 are qualified as "UJ" based on potential indeterminate bias.

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The CCV analyzed on 9/12/2017 at 9:43 exhibited %Ds above the control limit for dichlorodifluoromethane (33.5%), bromomethane (20.4%), chloroethane (26.3%), trichlorofluoromethane (23.2%), 1,1-dichloroethene (23%), trans-1,2-dichloroethene (20.8%), 1,4-dioxane (-28.1%), tetrachloroethene (21.3%), 2-hexanone (-22%), 1,2,3-trichloropropane (-20.1%), naphthalene (-34%), and 1,2,3-trichlorobenzene (-25.5%). The associated results in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 7:18 exhibited a %D above the control limit for acetone (-22%). The associated result in sample SB03_18-19 are qualified as "J" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 8:18 exhibited %Ds above the control limit for dichlorodifluoromethane (23.9%) and 1,1-dichloroethene (22.4%). The associated results in sample TB03_090717 are qualified as "UJ" based on potential indeterminate bias.

L1734010:

The method blank (MB) for batch WG1047112 exhibited a detection of bromomethane (80 ug/kg). The associated results in samples SB11_19.5-20 and SB12_18-19 are qualified as "U" at the reporting limit based on potential blank contamination.

The CCV analyzed on 9/28/2017 at 18:59 exhibited %Ds above the control limit for dichlorodifluoromethane (20.1%), trichlorofluoromethane (-22.7%), ethyl ether (-26.8%), methyl tert-butyl ether (-22.4%), 1,1-dichloroethene (-22.6%), 2,2-dichloropropane (-20.7%), bromochloromethane (-20.4%), and 1,2-dichloropropane (-20.4%), and 2-hexanone (24.3%). The associated results in samples SB11_19.5-20, SB12_18-19, and SB13_18-19 are qualified as "J" or "UJ" based on potential indeterminate bias.

SVOCs by SW-846 Method 8270D and 8270C-SIM:

L1731144:

The LCSD for batch WG1038824 exhibited a percent recovery below the LCL for biphenyl (53%). The associated results in sample SB09_0-2 are qualified as "UJ" based on potential low bias.

The CCV analyzed on 9/10/2017 at 11:48 exhibited a %D above the control limit for hexachlorocyclopentadiene (22.4%). The associated results in sample SB09_0-2 are qualified as "UJ" based on potential indeterminate bias.

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L1731335:

The LCS/LCSD for batch WG1039349 exhibited a percent recovery below the LCL for benzoic acid (0%). The associated results in samples SB04_6-7, SB08_23-24, SB07_0-2, SB06_23-23.5, and SB05_6-7 are qualified as "UJ" based on potential low bias.

The CCV analyzed on 9/11/2017 at 7:21 exhibited %Ds above the control limit for p-chloro-m-cresol (-22.2%) and 2,4,5-trichlorophenol (-23.6%). The associated results in sample FB01_090617 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/11/2017 at 7:22 exhibited %Ds above the control limit for 2,4-dimethylphenol (-20.1%), 3-nitroaniline (-22%), 2,4-dinitrotoluene (-20.7%), and 4-nitrophenol (-23.3%), and di-n-butylphthalate (-21.9%). The associated results in samples SB04_6-7, SB08_23-24, SB07_0-2, and SB06_23-23.5 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/11/2017 at 20:04 exhibited a %D above the control limit for hexachlorocyclopentadiene (20.9%). The associated results in sample SB05_6-7 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/11/2017 at 21:05 exhibited a %D above the control limit for 3,3'-dimethylbenzidine (-24.8%). The associated results in sample SB05_6-7 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/13/2017 at 12:34 exhibited %Ds above the control limit for benzoic acid (-20.6%), hexachlorocyclopentadiene (27.4%), and 4-nitrophenol (-36.9%), and pentachlorophenol (34.5%). The associated results in sample SB06_23-23.5 are qualified as "UJ" based on potential indeterminate bias.

L1731603:

The CCV analyzed on 9/15/2017 at 7:39 exhibited a %D above the control limit for bis(2-ethylhexyl)phthalate (-20.7%). The associated result in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

The CCV analyzed on 9/12/2017 at 9:23 exhibited a %D above the control limit for 2-nitrophenol (-23.4%). The associated result in sample FB02_090717 are qualified as "UJ" based on potential indeterminate bias.

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Pesticides by SW-846 Method 8081B:

L1731335:

The sample SB07_0-2 exhibited a dual column RPD above the control limit for endosulfan II. The associated result is qualified as "J" based on potential indeterminate bias.

L1731603:

The sample SB02_6-7 exhibited dual column RPDs above the control limit for 4,4'-DDE, chlordane, heptachlor, and trans-chlordane. The associated results are qualified as "J" based on potential indeterminate bias.

Metals by SW-846 Method 6010C:

L1731335:

The MB for batch WG1040374 exhibited a detection of chromium, total (0.00025 mg/l). The associated results in sample FB01_090617 are qualified as "U" at the reporting limit based on potential blank contamination.

The continuing calibration blank (R1001572-20) exhibited a detection of sodium (44.9 ug/l). The associated result in sample FB01_090617 is qualified as "U" at the sample concentration based on potential blank contamination.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by SW-846 Method 8260C:

L1731144:

The LCS for batch WG1040719 exhibited a percent recovery above the UCL for methyl tert butyl ether (131%). The associated results are non-detections. No qualification is necessary.

The MB for batch WG1040719 exhibited detections of bromomethane (1.7 ug/kg) and methylene chloride (1.7 ug/kg). The associated results are non-detections. No qualification is necessary.

L1731335:

The MB for batch WG1040719 exhibited detections of bromomethane (1.7 ug/kg) and methylene chloride (1.7 ug/kg). The associated results are non-detections. No qualification is necessary.

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The LCS/LCSD for batch WG1040944 exhibited percent recoveries above the UCL for 1,2,3-trichlorobenzene (140%, 140%) and 2,2-dichloropropane (140%, 140%). The associated results are non-detections. No qualification is necessary.

The LCS/LCSD for batch WG1041231 exhibited a percent recovery above the UCL for methyl tert butyl ether (185%, 188%). The associated results are non-detections. No qualification is necessary.

L1731603:

The sample SB01_11.5-12 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (146%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The trip blank (TB) (TB03_090717) exhibited a detection of acetone (1.8 ug/l). The associated results are non-detections. No qualification is necessary.

L1734010:

The sample SB11_19.5-20 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (134%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

The sample SB13_18-19 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (132%). The other three volatile surrogates were recovered within the control limits. No qualification is necessary.

SVOCs by SW-846 Method 8270D and 8270C-SIM:

L1731144:

The sample SB09_0-2 exhibited a percent recovery below the LCL for the surrogate 2-fluorophenol (22%). The other two acid extractable surrogates were recovered within the control limits. No qualification is necessary.

L1731335:

The LCS/LCSD for batch WG1039521 exhibited a percent recovery above the UCL for p-chloro-m-cresol (100%, 113%). The associated results are non-detections. No qualification is necessary.

L1731603:

The LCS/LCSD for batch WG1039521 exhibited a percent recovery above the UCL for p-chloro-m-cresol (100%, 113%). The associated results are non-detections. No qualification is necessary.

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The LCS/LCSD for batch WG1039560 exhibited percent recoveries above the UCL for 4-nitrophenol (133%, 123%) and p-chloro-m-cresol (106%). The associated results are non-detections. No qualification is necessary.

Pesticides by SW-846 Method 8081B:

L1731335:

The LCS for batch WG1039570 exhibited a percent recovery above the UCL for delta-bhc (159%). The associated results are non-detections. No qualification is necessary.

The CCV analyzed on 9/11/2017 at 16:25 exhibited %Ds above the control limit on the secondary column for endrin aldehyde (21%) and methoxychlor (21.9%). The associated results in sample FB01_090617 are reported from the primary column. No qualification is necessary.

L1731603:

The LCSD for batch WG1041362 exhibited a percent recovery above the UCL for methoxychlor (154%). The associated results are non-detections. No qualification is necessary.

Metals by SW-846 Method 6010C:

L1731144:

The MB for batch WG1039090 exhibited a detection of copper, total (0.216 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

L1731335:

The MB for batch WG1039483 exhibited detections of manganese, total (1.59 mg/kg) and sodium, total (1.37 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The field blank (FB) (FB01_090617) exhibited detections of barium, total (0.00045 mg/l), calcium, total (0.0492 mg/l), and chromium, total (0.00056 mg/l), and sodium, total (0.245 mg/l). The associated results are non-detections. No qualification is necessary.

L1731603:

The MB for batch WG1039885 exhibited detections of calcium, total (1.54 mg/kg) and sodium, total (2.85 mg/kg). The associated results are >10X the contamination. No qualification is necessary.

The FB (FB02_090717) exhibited detections of aluminum, total (0.0283 mg/l), barium, total (0.00153 mg/l), calcium, total (0.457 mg/l), chromium, total (0.00098 mg/l), copper, total (0.0005

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mg/l), iron, total (0.0545 mg/l), lead, total (0.00131 mg/l), magnesium, total (0.0754 mg/l), manganese, total (0.00095 mg/l), nickel, total (0.00148 mg/l), potassium, total (0.102 mg/l), sodium, total (0.176 mg/l), and zinc, total (0.02017 mg/l). The associated results are non-detections. No qualification is necessary.

COMMENTS:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: January 23, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Soil Vapor Samples Collected in December 2018 and January 2019
Langan Project No.: 170487003

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil vapor samples collected in December 2018 and January 2019 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs) by the methods specified below.

- VOCs by USEPA Method TO-15

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

TABLE 1: SAMPLE SUMMARY

SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1900163	L1900163-01	RAA01	12/31/2018	VOCs
L1900163	L1900163-02	RSV01	12/31/2018	VOCs
L1900163	L1900163-03	RSV02	12/31/2018	VOCs
L1900163	L1900163-04	RSSV01	12/31/2018	VOCs
L1900163	L1900163-05	RSSV02	12/31/2018	VOCs
L1900163	L1900163-06	RSSV03	12/31/2018	VOCs
L1900163	L1900163-07	RSSV04	12/31/2018	VOCs
L1900163	L1900163-08	RSSV07	12/31/2018	VOCs
L1900997	L1900997-01	RSSV05	1/9/2019	VOCs
L1900997	L1900997-02	RSSV06	1/9/2019	VOCs

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Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017 and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, target compound identification and quantification, chromatograms, and overall system performance.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

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TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
RAA01	TO-15	120-82-1	1,2,4-TRICHLORO BENZENE	UJ
RSV01	TO-16	120-82-2	1,2,4-TRICHLORO BENZENE	UJ
RSV02	TO-17	120-82-3	1,2,4-TRICHLORO BENZENE	UJ
RSSV01	TO-18	120-82-4	1,2,4-TRICHLORO BENZENE	UJ
RSSV02	TO-19	120-82-5	1,2,4-TRICHLORO BENZENE	UJ
RSSV03	TO-20	120-82-6	1,2,4-TRICHLORO BENZENE	UJ
RSSV04	TO-21	120-82-7	1,2,4-TRICHLORO BENZENE	UJ
RSSV07	TO-22	120-82-8	1,2,4-TRICHLORO BENZENE	UJ
RSSV05	TO-23	120-82-9	1,2,4-TRICHLORO BENZENE	UJ
RSSV06	TO-24	120-82-10	1,2,4-TRICHLORO BENZENE	UJ

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by USEPA Method TO-15:

L1900997:

The initial calibration (ICAL) for instrument AIRLAB17 exhibited a relative standard deviation (RSD) above the control limit for 1,2,4-trichlorobenzene (31.1%). The associated results in sample RSSV05 and RSSV06 are qualified as "UJ" based on potential indeterminate bias.

L1900163:

The ICAL for instrument AIRLAB17 exhibited a RSD above the control limit for 1,2,4-trichlorobenzene (31.1%). The associated results in sample RAA01, RSV01, RSV02, RSSV01, RSSV02, RSSV03, RSSV04, and RSSV07 are qualified as "UJ" based on potential indeterminate bias.

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OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. No other deficiencies were identified.

COMMENTS:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Julia Leung, Langan Project Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 28, 2019

Re: Data Usability Summary Report
For Gerard & 146th Street
Soil Vapor Samples Collected in September 2017
Langan Project No.: 170487003

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil vapor samples collected in September 2017 by Langan Engineering and Environmental Services ("Langan") at the Gerard & 146th Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs) by the methods specified below.

- VOCs by USEPA Method TO-15

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1731370	L1731370-01	SV06_090617	9/6/2017	VOCs
L1731370	L1731370-02	SV08_090617	9/6/2017	VOCs
L1731622	L1731622-01	RSV02	9/7/2017	VOCs
L1731622	L1731622-02	RSSV01	9/7/2017	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II Standard Operating Procedure (SOP) #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-33A, "Low/Medium Volatile Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017 and the specifics of the methods employed.

Technical Memorandum

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, target compound identification and quantification, chromatograms, and overall system performance.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
No qualification necessary.				

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

Technical Memorandum

Data Usability Summary Report
For Gerard & 146th Street
Soil Vapor Samples Collected in September 2017
Langan Project No.: 170487003
February 28, 2019 Page 3 of 3

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. No minor deficiencies were identified.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. No other deficiencies were identified.

COMMENTS:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

APPENDIX G

LABORATORY DATA REPORTS



ANALYTICAL REPORT

Lab Number:	L1900163
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE & E. 146 STREET
Project Number:	170487001
Report Date:	01/09/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900163-01	RAA01	AIR	BRONX, NY	12/31/18 11:05	01/02/19
L1900163-02	RSV01	SOIL_VAPOR	BRONX, NY	12/31/18 11:29	01/02/19
L1900163-03	RSV02	SOIL_VAPOR	BRONX, NY	12/31/18 11:17	01/02/19
L1900163-04	RSSV01	SOIL_VAPOR	BRONX, NY	12/31/18 10:55	01/02/19
L1900163-05	RSSV02	SOIL_VAPOR	BRONX, NY	12/31/18 12:10	01/02/19
L1900163-06	RSSV03	SOIL_VAPOR	BRONX, NY	12/31/18 12:26	01/02/19
L1900163-07	RSSV04	SOIL_VAPOR	BRONX, NY	12/31/18 12:38	01/02/19
L1900163-08	RSSV07	SOIL_VAPOR	BRONX, NY	12/31/18 11:53	01/02/19

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 19, 2018. The canister certification results are provided as an addendum.

L1900163-01 through -04: results for Acetone should be considered estimated due to co-elution with a non-target peak.

L1900163-02: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L1900163-06 results for Acetone should be considered estimated due to co-elution with a non-target peak.

L1900163-07: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 01/09/19

AIR

Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-01

Date Collected: 12/31/18 11:05

Client ID: RAA01

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15

Analytical Date: 01/08/19 17:53

Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.698	0.200	--	3.45	0.989	--		1
Chloromethane	0.567	0.200	--	1.17	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.212	0.200	--	0.469	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	15.0	5.00	--	28.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.82	1.00	--	11.4	2.38	--		1
Trichlorofluoromethane	0.365	0.200	--	2.05	1.12	--		1
Isopropanol	1.80	0.500	--	4.42	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-01
 Client ID: RAA01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:05
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.454	0.200	--	1.60	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.642	0.200	--	2.05	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.223	0.200	--	1.04	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.11	0.200	--	4.18	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-01

Date Collected: 12/31/18 11:05

Client ID: RAA01

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.447	0.400	--	1.94	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	76		60-140
chlorobenzene-d5	94		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-02 D
 Client ID: RSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:29
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 20:25
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.510	0.500	--	2.52	2.47	--		2.5
Chloromethane	ND	0.500	--	ND	1.03	--		2.5
Freon-114	ND	0.500	--	ND	3.49	--		2.5
Vinyl chloride	ND	0.500	--	ND	1.28	--		2.5
1,3-Butadiene	ND	0.500	--	ND	1.11	--		2.5
Bromomethane	ND	0.500	--	ND	1.94	--		2.5
Chloroethane	ND	0.500	--	ND	1.32	--		2.5
Ethanol	ND	12.5	--	ND	23.6	--		2.5
Vinyl bromide	ND	0.500	--	ND	2.19	--		2.5
Acetone	ND	2.50	--	ND	5.94	--		2.5
Trichlorofluoromethane	ND	0.500	--	ND	2.81	--		2.5
Isopropanol	ND	1.25	--	ND	3.07	--		2.5
1,1-Dichloroethene	ND	0.500	--	ND	1.98	--		2.5
Tertiary butyl Alcohol	ND	1.25	--	ND	3.79	--		2.5
Methylene chloride	ND	1.25	--	ND	4.34	--		2.5
3-Chloropropene	ND	0.500	--	ND	1.57	--		2.5
Carbon disulfide	1.02	0.500	--	3.18	1.56	--		2.5
Freon-113	ND	0.500	--	ND	3.83	--		2.5
trans-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--		2.5
1,1-Dichloroethane	ND	0.500	--	ND	2.02	--		2.5
Methyl tert butyl ether	ND	0.500	--	ND	1.80	--		2.5
2-Butanone	2.12	1.25	--	6.25	3.69	--		2.5
cis-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--		2.5



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-02 D
 Client ID: RSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:29
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.25	--	ND	4.50	--		2.5
Chloroform	ND	0.500	--	ND	2.44	--		2.5
Tetrahydrofuran	ND	1.25	--	ND	3.69	--		2.5
1,2-Dichloroethane	ND	0.500	--	ND	2.02	--		2.5
n-Hexane	1.25	0.500	--	4.41	1.76	--		2.5
1,1,1-Trichloroethane	ND	0.500	--	ND	2.73	--		2.5
Benzene	1.09	0.500	--	3.48	1.60	--		2.5
Carbon tetrachloride	ND	0.500	--	ND	3.15	--		2.5
Cyclohexane	ND	0.500	--	ND	1.72	--		2.5
1,2-Dichloropropane	ND	0.500	--	ND	2.31	--		2.5
Bromodichloromethane	ND	0.500	--	ND	3.35	--		2.5
1,4-Dioxane	ND	0.500	--	ND	1.80	--		2.5
Trichloroethene	ND	0.500	--	ND	2.69	--		2.5
2,2,4-Trimethylpentane	ND	0.500	--	ND	2.34	--		2.5
Heptane	1.36	0.500	--	5.57	2.05	--		2.5
cis-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--		2.5
4-Methyl-2-pentanone	ND	1.25	--	ND	5.12	--		2.5
trans-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--		2.5
1,1,2-Trichloroethane	ND	0.500	--	ND	2.73	--		2.5
Toluene	107	0.500	--	403	1.88	--		2.5
2-Hexanone	1.81	0.500	--	7.42	2.05	--		2.5
Dibromochloromethane	ND	0.500	--	ND	4.26	--		2.5
1,2-Dibromoethane	ND	0.500	--	ND	3.84	--		2.5
Tetrachloroethene	4.36	0.500	--	29.6	3.39	--		2.5
Chlorobenzene	ND	0.500	--	ND	2.30	--		2.5
Ethylbenzene	4.22	0.500	--	18.3	2.17	--		2.5



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-02 D
 Client ID: RSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:29
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	16.5	1.00	--	71.7	4.34	--		2.5
Bromoform	ND	0.500	--	ND	5.17	--		2.5
Styrene	ND	0.500	--	ND	2.13	--		2.5
1,1,2,2-Tetrachloroethane	ND	0.500	--	ND	3.43	--		2.5
o-Xylene	5.84	0.500	--	25.4	2.17	--		2.5
4-Ethyltoluene	1.36	0.500	--	6.69	2.46	--		2.5
1,3,5-Trimethylbenzene	1.07	0.500	--	5.26	2.46	--		2.5
1,2,4-Trimethylbenzene	4.04	0.500	--	19.9	2.46	--		2.5
Benzyl chloride	ND	0.500	--	ND	2.59	--		2.5
1,3-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,4-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,2-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,2,4-Trichlorobenzene	ND	0.500	--	ND	3.71	--		2.5
Hexachlorobutadiene	ND	0.500	--	ND	5.33	--		2.5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	98		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-03
 Client ID: RSV02
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:17
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 21:03
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.507	0.200	--	2.51	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.57	1.00	--	13.2	2.38	--		1
Trichlorofluoromethane	0.230	0.200	--	1.29	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	2.12	0.200	--	6.60	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	22.1	0.500	--	65.2	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-03

Date Collected: 12/31/18 11:17

Client ID: RSV02

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.687	0.200	--	3.35	0.977	--		1
Tetrahydrofuran	0.907	0.500	--	2.68	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.94	0.200	--	6.84	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.923	0.200	--	2.95	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.358	0.200	--	1.23	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.428	0.200	--	2.00	0.934	--		1
Heptane	1.52	0.200	--	6.23	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	23.8	0.200	--	89.7	0.754	--		1
2-Hexanone	3.60	0.200	--	14.8	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	4.34	0.200	--	29.4	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	4.16	0.200	--	18.1	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-03

Date Collected: 12/31/18 11:17

Client ID: RSV02

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	16.5	0.400	--	71.7	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	5.78	0.200	--	25.1	0.869	--		1
4-Ethyltoluene	1.40	0.200	--	6.88	0.983	--		1
1,3,5-Trimethylbenzene	1.03	0.200	--	5.06	0.983	--		1
1,2,4-Trimethylbenzene	4.13	0.200	--	20.3	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	100		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-04
 Client ID: RSSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 10:55
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 21:42
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.547	0.200	--	2.70	0.989	--		1
Chloromethane	0.234	0.200	--	0.483	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.86	1.00	--	4.42	2.38	--		1
Trichlorofluoromethane	0.919	0.200	--	5.16	1.12	--		1
Isopropanol	0.658	0.500	--	1.62	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-04
 Client ID: RSSV01
 Sample Location: BRONX, NY

Date Collected: 12/31/18 10:55
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.319	0.200	--	1.02	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.740	0.200	--	2.79	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	8.42	0.200	--	57.1	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.866	0.200	--	3.76	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-04

Date Collected: 12/31/18 10:55

Client ID: RSSV01

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	4.00	0.400	--	17.4	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.32	0.200	--	5.73	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.207	0.200	--	1.02	0.983	--		1
1,2,4-Trimethylbenzene	0.716	0.200	--	3.52	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	104		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-05
 Client ID: RSSV02
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:10
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 22:20
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.530	0.200	--	2.62	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.87	1.00	--	18.7	2.38	--		1
Trichlorofluoromethane	0.417	0.200	--	2.34	1.12	--		1
Isopropanol	0.949	0.500	--	2.33	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.16	0.500	--	3.42	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-05
 Client ID: RSSV02
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:10
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.502	0.200	--	1.77	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.479	0.200	--	1.65	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	3.91	0.200	--	16.0	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.31	0.200	--	4.94	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.51	0.200	--	6.56	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-05

Date Collected: 12/31/18 12:10

Client ID: RSSV02

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	4.97	0.400	--	21.6	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	2.42	0.200	--	10.5	0.869	--		1
4-Ethyltoluene	0.521	0.200	--	2.56	0.983	--		1
1,3,5-Trimethylbenzene	0.746	0.200	--	3.67	0.983	--		1
1,2,4-Trimethylbenzene	1.75	0.200	--	8.60	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	86		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	97		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-06
 Client ID: RSSV03
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:26
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/08/19 22:58
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.544	0.200	--	2.69	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.19	1.00	--	12.3	2.38	--		1
Trichlorofluoromethane	0.403	0.200	--	2.26	1.12	--		1
Isopropanol	0.533	0.500	--	1.31	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.787	0.500	--	2.73	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.427	0.200	--	1.33	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	4.97	0.500	--	14.7	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-06
 Client ID: RSSV03
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:26
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.631	0.200	--	3.08	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	0.604	0.200	--	2.44	0.809	--		1
n-Hexane	2.99	0.200	--	10.5	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	9.48	0.200	--	30.3	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.407	0.200	--	1.40	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.226	0.200	--	1.06	0.934	--		1
Heptane	2.24	0.200	--	9.18	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	17.2	0.200	--	64.8	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	8.28	0.200	--	56.1	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	2.13	0.200	--	9.25	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-06

Date Collected: 12/31/18 12:26

Client ID: RSSV03

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	10.4	0.400	--	45.2	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	3.72	0.200	--	16.2	0.869	--		1
4-Ethyltoluene	1.02	0.200	--	5.01	0.983	--		1
1,3,5-Trimethylbenzene	0.882	0.200	--	4.34	0.983	--		1
1,2,4-Trimethylbenzene	3.52	0.200	--	17.3	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	107		60-140



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-07 D

Date Collected: 12/31/18 12:38

Client ID: RSSV04

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 01/09/19 09:05

Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
Freon-114	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	ND	1.00	--	ND	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethanol	ND	25.0	--	ND	47.1	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	36.3	5.00	--	86.2	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
Isopropanol	ND	2.50	--	ND	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Tertiary butyl Alcohol	ND	2.50	--	ND	7.58	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	1.76	1.00	--	5.48	3.11	--		5
Freon-113	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
2-Butanone	6.14	2.50	--	18.1	7.37	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-07 D

Date Collected: 12/31/18 12:38

Client ID: RSSV04

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5
Chloroform	2.14	1.00	--	10.5	4.88	--		5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	3.17	1.00	--	11.2	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	1.72	1.00	--	5.49	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	2.28	1.00	--	7.85	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	ND	1.00	--	ND	5.37	--		5
2,2,4-Trimethylpentane	ND	1.00	--	ND	4.67	--		5
Heptane	13.9	1.00	--	57.0	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	ND	2.50	--	ND	10.2	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	10.6	1.00	--	39.9	3.77	--		5
2-Hexanone	ND	1.00	--	ND	4.10	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	7.67	1.00	--	52.0	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	4.07	1.00	--	17.7	4.34	--		5



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-07 D
 Client ID: RSSV04
 Sample Location: BRONX, NY

Date Collected: 12/31/18 12:38
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	20.5	2.00	--	89.0	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	10.3	1.00	--	44.7	4.34	--		5
4-Ethyltoluene	1.38	1.00	--	6.78	4.92	--		5
1,3,5-Trimethylbenzene	4.00	1.00	--	19.7	4.92	--		5
1,2,4-Trimethylbenzene	4.12	1.00	--	20.3	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	76		60-140
chlorobenzene-d5	114		60-140



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-08
 Client ID: RSSV07
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:53
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/09/19 00:12
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.533	0.200	--	2.64	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.83	1.00	--	6.72	2.38	--		1
Trichlorofluoromethane	0.284	0.200	--	1.60	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900163-08

Date Collected: 12/31/18 11:53

Client ID: RSSV07

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.464	0.200	--	1.75	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.720	0.200	--	4.88	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	17.5	0.200	--	76.0	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900163-08
 Client ID: RSSV07
 Sample Location: BRONX, NY

Date Collected: 12/31/18 11:53
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	61.5	0.400	--	267	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	17.5	0.200	--	76.0	0.869	--		1
4-Ethyltoluene	0.226	0.200	--	1.11	0.983	--		1
1,3,5-Trimethylbenzene	0.290	0.200	--	1.43	0.983	--		1
1,2,4-Trimethylbenzene	0.900	0.200	--	4.42	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	115		60-140



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/08/19 15:26

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1195786-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/08/19 15:26

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1195786-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/08/19 15:26

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1195786-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
Chlorodifluoromethane	90		-		70-130	-		
Propylene	103		-		70-130	-		
Propane	77		-		70-130	-		
Dichlorodifluoromethane	112		-		70-130	-		
Chloromethane	94		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	110		-		70-130	-		
Methanol	78		-		70-130	-		
Vinyl chloride	107		-		70-130	-		
1,3-Butadiene	102		-		70-130	-		
Butane	97		-		70-130	-		
Bromomethane	110		-		70-130	-		
Chloroethane	114		-		70-130	-		
Ethyl Alcohol	74		-		70-130	-		
Dichlorofluoromethane	89		-		70-130	-		
Vinyl bromide	109		-		70-130	-		
Acrolein	87		-		70-130	-		
Acetone	110		-		70-130	-		
Acetonitrile	95		-		70-130	-		
Trichlorofluoromethane	122		-		70-130	-		
iso-Propyl Alcohol	100		-		70-130	-		
Acrylonitrile	88		-		70-130	-		
Pentane	95		-		70-130	-		
Ethyl ether	83		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
1,1-Dichloroethene	108		-		70-130	-		
tert-Butyl Alcohol	81		-		70-130	-		
Methylene chloride	96		-		70-130	-		
3-Chloropropene	100		-		70-130	-		
Carbon disulfide	98		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	114		-		70-130	-		
trans-1,2-Dichloroethene	104		-		70-130	-		
1,1-Dichloroethane	104		-		70-130	-		
Methyl tert butyl ether	88		-		70-130	-		
Vinyl acetate	104		-		70-130	-		
2-Butanone	99		-		70-130	-		
cis-1,2-Dichloroethene	105		-		70-130	-		
Ethyl Acetate	106		-		70-130	-		
Chloroform	112		-		70-130	-		
Tetrahydrofuran	91		-		70-130	-		
2,2-Dichloropropane	102		-		70-130	-		
1,2-Dichloroethane	116		-		70-130	-		
n-Hexane	91		-		70-130	-		
Isopropyl Ether	80		-		70-130	-		
Ethyl-Tert-Butyl-Ether	70		-		70-130	-		
1,2-Dichloroethene (total)	105		-			-		
1,2-Dichloroethene (total)	105		-			-		
1,1,1-Trichloroethane	107		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
1,1-Dichloropropene	90		-		70-130	-		
Benzene	89		-		70-130	-		
Carbon tetrachloride	117		-		70-130	-		
Cyclohexane	91		-		70-130	-		
Tertiary-Amyl Methyl Ether	66	Q	-		70-130	-		
Dibromomethane	95		-		70-130	-		
1,2-Dichloropropane	91		-		70-130	-		
Bromodichloromethane	105		-		70-130	-		
1,4-Dioxane	96		-		70-130	-		
Trichloroethene	97		-		70-130	-		
2,2,4-Trimethylpentane	93		-		70-130	-		
Methyl Methacrylate	93		-		70-130	-		
Heptane	89		-		70-130	-		
cis-1,3-Dichloropropene	91		-		70-130	-		
4-Methyl-2-pentanone	88		-		70-130	-		
trans-1,3-Dichloropropene	82		-		70-130	-		
1,1,2-Trichloroethane	98		-		70-130	-		
Toluene	97		-		70-130	-		
1,3-Dichloropropane	92		-		70-130	-		
2-Hexanone	88		-		70-130	-		
Dibromochloromethane	120		-		70-130	-		
1,2-Dibromoethane	100		-		70-130	-		
Butyl Acetate	81		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS	Qual	LCSD	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
Octane	92		-		70-130	-		
Tetrachloroethene	99		-		70-130	-		
1,1,1,2-Tetrachloroethane	102		-		70-130	-		
Chlorobenzene	99		-		70-130	-		
Ethylbenzene	99		-		70-130	-		
p/m-Xylene	102		-		70-130	-		
Bromoform	117		-		70-130	-		
Styrene	95		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		
o-Xylene	104		-		70-130	-		
1,2,3-Trichloropropane	94		-		70-130	-		
Nonane (C9)	84		-		70-130	-		
Isopropylbenzene	100		-		70-130	-		
Bromobenzene	93		-		70-130	-		
o-Chlorotoluene	97		-		70-130	-		
n-Propylbenzene	99		-		70-130	-		
p-Chlorotoluene	99		-		70-130	-		
4-Ethyltoluene	105		-		70-130	-		
1,3,5-Trimethylbenzene	88		-		70-130	-		
tert-Butylbenzene	103		-		70-130	-		
1,2,4-Trimethylbenzene	109		-		70-130	-		
Decane (C10)	100		-		70-130	-		
Benzyl chloride	129		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900163

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195786-3								
1,3-Dichlorobenzene	108		-		70-130	-		
1,4-Dichlorobenzene	105		-		70-130	-		
sec-Butylbenzene	101		-		70-130	-		
p-Isopropyltoluene	99		-		70-130	-		
1,2-Dichlorobenzene	110		-		70-130	-		
n-Butylbenzene	114		-		70-130	-		
1,2-Dibromo-3-chloropropane	109		-		70-130	-		
Undecane	104		-		70-130	-		
Dodecane (C12)	102		-		70-130	-		
1,2,4-Trichlorobenzene	115		-		70-130	-		
Naphthalene	110		-		70-130	-		
1,2,3-Trichlorobenzene	106		-		70-130	-		
Hexachlorobutadiene	121		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900163

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1195786-5 QC Sample: L1900607-01 Client ID: DUP Sample						
Dichlorodifluoromethane	0.552	0.555	ppbV	1		25
Chloromethane	0.477	0.496	ppbV	4		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	2.78	2.74	ppbV	1		25
Trichlorofluoromethane	0.865	0.867	ppbV	0		25
iso-Propyl Alcohol	2.12	2.10	ppbV	1		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	0.865	0.865	ppbV	0		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900163

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1195786-5 QC Sample: L1900607-01 Client ID: DUP Sample						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
Xylene (Total)	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.804	0.784	ppbV	3		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900163

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1195786-5 QC Sample: L1900607-01 Client ID: DUP Sample						
Ethylbenzene	ND	ND	ppbV	NC		25
p/m-Xylene	ND	ND	ppbV	NC		25
1,2-Dichloroethene (total)	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
1,3-Dichloropropene, Total	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: GERARD AVE & E. 146 STREET

Serial_No:01091914:45
Lab Number: L1900163

Project Number: 170487001

Report Date: 01/09/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1900163-01	RAA01	0972	Flow 3	12/19/18	281620		-	-	-	Pass	18.0	17.8	1
L1900163-01	RAA01	2078	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.7	-3.7	-	-	-	-
L1900163-02	RSV01	0575	Flow 4	12/19/18	281620		-	-	-	Pass	18.0	18.0	0
L1900163-02	RSV01	2206	2.7L Can	12/19/18	281620	L1851680-01	Pass	-28.8	-4.0	-	-	-	-
L1900163-03	RSV02	0138	Flow 4	12/19/18	281620		-	-	-	Pass	18.0	18.3	2
L1900163-03	RSV02	2299	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.5	-3.0	-	-	-	-
L1900163-04	RSSV01	0934	Flow 3	12/19/18	281620		-	-	-	Pass	18.0	18.9	5
L1900163-04	RSSV01	2225	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.5	-2.3	-	-	-	-
L1900163-05	RSSV02	01143	SV20	12/28/18	282079		-	-	-	Pass	19.1	16.7	13
L1900163-05	RSSV02	2599	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.5	-4.7	-	-	-	-
L1900163-06	RSSV03	0387	Flow 3	12/19/18	281620		-	-	-	Pass	18.0	19.4	7
L1900163-06	RSSV03	174	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.6	-4.1	-	-	-	-
L1900163-07	RSSV04	0401	Flow 3	12/19/18	281620		-	-	-	Pass	18.0	17.7	2
L1900163-07	RSSV04	2347	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.4	-4.4	-	-	-	-
L1900163-08	RSSV07	0507	SV200	12/28/18	282079		-	-	-	Pass	19.0	16.5	14



Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Serial_No:01091914:45
Lab Number: L1900163

Report Date: 01/09/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1900163-08	RSSV07	2210	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.4	-4.4	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/14/18 21:42
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/14/18 21:42
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/09/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	91		60-140



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900163**Project Number:** 170487001**Report Date:** 01/09/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

N/A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900163-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-05A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-06A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-07A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900163-08A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: Data Usability Report



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900163
Report Date: 01/09/19

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



AIR ANALYSIS

PAGE 1 OF 1

320 Forbes Blvd, Mansfield, MA 02048
 TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Langan Engineering
 Address: 21 Penn Plaza, 360 W. 31st Street
 8th Floor, NY, NY 10001-2727
 Phone: (212) 479-5400
 Fax: (212) 479-5444
 Email: jleung@langan.com

Project Information

Project Name: Gerard Ave + E. 146th St.
 Project Location: Bronx, NY
 Project #: 170487001
 Project Manager: Julia Leung
 ALPHA Quote #: 7013

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due: _____ Time: _____

Date Rec'd in Lab: 1/3/19

Report Information - Data Deliverables

FAX
 ADEX
 Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)
 Other Formats: _____
 EMAIL (standard pdf report)
 Additional Deliverables: ASP-B
 Report to: (if different than Project Manager)

ALPHA Job #: L900163

Billing Information

Same as Client info PO #: _____

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:
 Please also cc: datamanagement@langan.com and vzlvaga@langan.com

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
		Date	Start Time	End Time	Initial Vacuum	Final Vacuum													
00163, 01	RAA01	12/31/18	0900	1105	-30.63	-5.42	AA	JL	2.7L	2078	0972	X							
02	RSV01		0927	1129	-29.47	-5.69	SV	JL		2206	0575	X							
03	RSV02		0913	1117	-30.80	-4.84		JL		2299	0138	X							
04	RSSV01		0855	1055	-29.0	-4.30		JL		2225	0934	X							
05	RSSV02		1010	1210	-30.72	-6.65		JL		2599	0173	X							
06	RSSV03		1025	1226	-30.80	-5.99		JL		174	0387	X							
07	RSSV04		1034	1238	-29.9	-6.23		JL		2347	0401	X							
08	RSSV07		0951	1153	-30.33	-6.71		JL		2210	0507	X							

*SAMPLE MATRIX CODES
 AA = Ambient Air (Indoor/Outdoor)
 SV = Soil Vapor/Landfill Gas/SVE
 Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By: *[Signature]* Date/Time: 1/2/19 - 3:15pm
 Received By: *[Signature]* Date/Time: 1/2/19 1515
[Signature] 0110318 0345
[Signature] 0110318 0200
[Signature] 1/3/19 0345



ANALYTICAL REPORT

Lab Number:	L1900997
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE & E. 146 STREET
Project Number:	170487001
Report Date:	01/15/19

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320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900997-01	RSSV05	SOIL_VAPOR	BRONX, NY	01/09/19 11:59	01/09/19
L1900997-02	RSSV06	SOIL_VAPOR	BRONX, NY	01/09/19 10:35	01/09/19

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

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Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 28, 2018. The canister certification results are provided as an addendum.

L1900997-02: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 01/15/19

AIR

Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-01

Date Collected: 01/09/19 11:59

Client ID: RSSV05

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 01/12/19 19:06

Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.545	0.200	--	2.69	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.06	1.00	--	7.27	2.38	--		1
Trichlorofluoromethane	0.285	0.200	--	1.60	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-01

Date Collected: 01/09/19 11:59

Client ID: RSSV05

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.237	0.200	--	0.757	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.42	0.200	--	9.12	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.319	0.200	--	2.16	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.573	0.200	--	2.49	0.869	--		1



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-01

Date Collected: 01/09/19 11:59

Client ID: RSSV05

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	2.14	0.400	--	9.30	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.563	0.200	--	2.45	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.893	0.200	--	4.39	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	95		60-140



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-02 D

Date Collected: 01/09/19 10:35

Client ID: RSSV06

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15

Analytical Date: 01/13/19 02:32

Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
Freon-114	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	ND	1.00	--	ND	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethanol	ND	25.0	--	ND	47.1	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	8.18	5.00	--	19.4	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
Isopropanol	ND	2.50	--	ND	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Tertiary butyl Alcohol	ND	2.50	--	ND	7.58	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	ND	1.00	--	ND	3.11	--		5
Freon-113	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
2-Butanone	ND	2.50	--	ND	7.37	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-02 D

Date Collected: 01/09/19 10:35

Client ID: RSSV06

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5
Chloroform	ND	1.00	--	ND	4.88	--		5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	ND	1.00	--	ND	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	ND	1.00	--	ND	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	ND	1.00	--	ND	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	ND	1.00	--	ND	5.37	--		5
2,2,4-Trimethylpentane	ND	1.00	--	ND	4.67	--		5
Heptane	4.08	1.00	--	16.7	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	ND	2.50	--	ND	10.2	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	2.34	1.00	--	8.82	3.77	--		5
2-Hexanone	ND	1.00	--	ND	4.10	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	2.22	1.00	--	15.1	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	2.72	1.00	--	11.8	4.34	--		5



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**SAMPLE RESULTS**

Lab ID: L1900997-02 D

Date Collected: 01/09/19 10:35

Client ID: RSSV06

Date Received: 01/09/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	10.0	2.00	--	43.4	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	5.98	1.00	--	26.0	4.34	--		5
4-Ethyltoluene	ND	1.00	--	ND	4.92	--		5
1,3,5-Trimethylbenzene	1.60	1.00	--	7.87	4.92	--		5
1,2,4-Trimethylbenzene	1.50	1.00	--	7.37	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	102		60-140



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/12/19 15:20

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1197111-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

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Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/12/19 15:20

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1197111-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1



Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

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Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/12/19 15:20

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1197111-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Parameter	LCS	Qual	LCSD	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
Chlorodifluoromethane	94		-		70-130	-		
Propylene	115		-		70-130	-		
Propane	84		-		70-130	-		
Dichlorodifluoromethane	116		-		70-130	-		
Chloromethane	93		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	109		-		70-130	-		
Methanol	80		-		70-130	-		
Vinyl chloride	105		-		70-130	-		
1,3-Butadiene	102		-		70-130	-		
Butane	94		-		70-130	-		
Bromomethane	108		-		70-130	-		
Chloroethane	101		-		70-130	-		
Ethyl Alcohol	81		-		70-130	-		
Dichlorofluoromethane	97		-		70-130	-		
Vinyl bromide	104		-		70-130	-		
Acrolein	85		-		70-130	-		
Acetone	107		-		70-130	-		
Acetonitrile	91		-		70-130	-		
Trichlorofluoromethane	121		-		70-130	-		
iso-Propyl Alcohol	94		-		70-130	-		
Acrylonitrile	85		-		70-130	-		
Pentane	95		-		70-130	-		
Ethyl ether	67	Q	-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
1,1-Dichloroethene	106		-		70-130	-		
tert-Butyl Alcohol	75		-		70-130	-		
Methylene chloride	94		-		70-130	-		
3-Chloropropene	99		-		70-130	-		
Carbon disulfide	96		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	114		-		70-130	-		
trans-1,2-Dichloroethene	102		-		70-130	-		
1,1-Dichloroethane	102		-		70-130	-		
Methyl tert butyl ether	83		-		70-130	-		
Vinyl acetate	102		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	114		-		70-130	-		
Ethyl Acetate	105		-		70-130	-		
Chloroform	112		-		70-130	-		
Tetrahydrofuran	90		-		70-130	-		
2,2-Dichloropropane	98		-		70-130	-		
1,2-Dichloroethane	115		-		70-130	-		
n-Hexane	90		-		70-130	-		
Isopropyl Ether	76		-		70-130	-		
Ethyl-Tert-Butyl-Ether	66	Q	-		70-130	-		
1,2-Dichloroethene (total)	108		-			-		
1,2-Dichloroethene (total)	108		-			-		
1,1,1-Trichloroethane	104		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
1,1-Dichloropropene	97		-		70-130	-		
Benzene	87		-		70-130	-		
Carbon tetrachloride	115		-		70-130	-		
Cyclohexane	90		-		70-130	-		
Tertiary-Amyl Methyl Ether	62	Q	-		70-130	-		
Dibromomethane	93		-		70-130	-		
1,2-Dichloropropane	88		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	94		-		70-130	-		
Trichloroethene	95		-		70-130	-		
2,2,4-Trimethylpentane	94		-		70-130	-		
Methyl Methacrylate	90		-		70-130	-		
Heptane	87		-		70-130	-		
cis-1,3-Dichloropropene	88		-		70-130	-		
4-Methyl-2-pentanone	86		-		70-130	-		
trans-1,3-Dichloropropene	80		-		70-130	-		
1,1,2-Trichloroethane	97		-		70-130	-		
Toluene	97		-		70-130	-		
1,3-Dichloropropane	89		-		70-130	-		
2-Hexanone	85		-		70-130	-		
Dibromochloromethane	119		-		70-130	-		
1,2-Dibromoethane	97		-		70-130	-		
Butyl Acetate	78		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Parameter	LCS	Qual	LCSD	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
Octane	90		-		70-130	-		
Tetrachloroethene	98		-		70-130	-		
1,1,1,2-Tetrachloroethane	102		-		70-130	-		
Chlorobenzene	98		-		70-130	-		
Ethylbenzene	98		-		70-130	-		
p/m-Xylene	102		-		70-130	-		
Bromoform	116		-		70-130	-		
Styrene	94		-		70-130	-		
1,1,2,2-Tetrachloroethane	103		-		70-130	-		
o-Xylene	104		-		70-130	-		
1,2,3-Trichloropropane	93		-		70-130	-		
Nonane (C9)	86		-		70-130	-		
Isopropylbenzene	100		-		70-130	-		
Bromobenzene	93		-		70-130	-		
o-Chlorotoluene	97		-		70-130	-		
n-Propylbenzene	99		-		70-130	-		
p-Chlorotoluene	99		-		70-130	-		
4-Ethyltoluene	104		-		70-130	-		
1,3,5-Trimethylbenzene	100		-		70-130	-		
tert-Butylbenzene	104		-		70-130	-		
1,2,4-Trimethylbenzene	109		-		70-130	-		
Decane (C10)	100		-		70-130	-		
Benzyl chloride	126		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900997

Report Date: 01/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197111-3								
1,3-Dichlorobenzene	106		-		70-130	-		
1,4-Dichlorobenzene	106		-		70-130	-		
sec-Butylbenzene	102		-		70-130	-		
p-Isopropyltoluene	99		-		70-130	-		
1,2-Dichlorobenzene	107		-		70-130	-		
n-Butylbenzene	112		-		70-130	-		
1,2-Dibromo-3-chloropropane	106		-		70-130	-		
Undecane	103		-		70-130	-		
Dodecane (C12)	100		-		70-130	-		
1,2,4-Trichlorobenzene	114		-		70-130	-		
Naphthalene	105		-		70-130	-		
1,2,3-Trichlorobenzene	102		-		70-130	-		
Hexachlorobutadiene	117		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900997

Report Date: 01/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197111-5 QC Sample: L1900997-02 Client ID: RSSV06						
Dichlorodifluoromethane	ND	ND	ppbV	NC		25
Chloromethane	ND	ND	ppbV	NC		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	8.18	7.66	ppbV	7		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900997

Report Date: 01/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197111-5 QC Sample: L1900997-02 Client ID: RSSV06						
2-Butanone	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Carbon tetrachloride	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	4.08	3.84	ppbV	6		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE & E. 146 STREET

Project Number: 170487001

Lab Number: L1900997

Report Date: 01/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197111-5 QC Sample: L1900997-02 Client ID: RSSV06						
Toluene	2.34	2.30	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	2.22	1.86	ppbV	18		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	2.72	2.54	ppbV	7		25
p/m-Xylene	10.0	9.74	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	5.98	5.74	ppbV	4		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	1.60	1.62	ppbV	1		25
1,2,4-Trimethylbenzene	1.50	1.54	ppbV	3		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: GERARD AVE & E. 146 STREET

Serial_No:01151916:50
Lab Number: L1900997

Project Number: 170487001

Report Date: 01/15/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1900997-01	RSSV05	0624	Flow 4	12/28/18	282079		-	-	-	Pass	18.0	8.7	70
L1900997-01	RSSV05	353	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.7	-10.37	-	-	-	-
L1900997-02	RSSV06	0854	Flow 4	12/28/18	282079		-	-	-	Pass	23.2	18.5	23
L1900997-02	RSSV06	207	2.7L Can	12/19/18	281620	L1851680-01	Pass	-29.4	-2.42	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/14/18 21:42
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/14/18 21:42
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1851680
Report Date: 01/15/19

Air Canister Certification Results

Lab ID: L1851680-01
 Client ID: CAN 336 SHELF 7
 Sample Location:

Date Collected: 12/14/18 09:00
 Date Received: 12/14/18
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	91		60-140



Project Name: GERARD AVE & E. 146 STREET**Lab Number:** L1900997**Project Number:** 170487001**Report Date:** 01/15/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

N/A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900997-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1900997-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: Data Usability Report



Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: GERARD AVE & E. 146 STREET
Project Number: 170487001

Lab Number: L1900997
Report Date: 01/15/19

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 1



CHAIN OF CUSTODY
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Project Information

Project Name: Gerard Ave + E. 146th St.

Project Location: Bronx, NY

Project #: 170487001

Project Manager: Julia Leung

ALPHA Quote #: 7013

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)

Date Due: _____ Time: _____

Date Rec'd in Lab:

Report Information - Data Deliverables

FAX
 ADEX
Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)

Other Formats: _____

EMAIL (standard pdf report)

Additional Deliverables: ASP-B deliverables

Report to: (if different than Project Manager)

ALPHA Job #: L1900997

Billing Information

Same as Client info PO #: _____

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:
Please also cc: datamanagement@langan.com and vzulvaga@langan.com

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS						Sample Comments (i.e. PID)		
		Date	Start Time								End Time	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES		TO-13A	TO-4 / TO-10
900997-01	RSSV05	1/9/19	0916	1159	-29.95	-11.38	SV	JL	2.7L	353	0624	X							
-02	RSSV06	↓	0833	1035	-29.79	-3.55	SV	JL	2.7L	207	0854	X							

***SAMPLE MATRIX CODES** AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Relinquished By:	Date/Time:	Received By:	Date/Time:
<i>JL JL</i>	1/9/19 - 1215	<i>George Wagner</i>	1/9/19 1215
<i>George Wagner</i>	1/10/19 1000	<i>Brendan Joler</i>	1/10/19 900
<i>Brendan Joler</i>	1/10/19 1000	<i>BRA</i>	1/10/19 10:00

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



ANALYTICAL REPORT

Lab Number:	L1931018
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	404 EXTERIOR ST
Project Number:	170487001
Report Date:	07/25/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1931018-01	RSSV08_071519	SOIL_VAPOR	BRONX, NY	07/15/19 05:04	07/15/19
L1931018-02	RSSV09_071519	SOIL_VAPOR	BRONX, NY	07/15/19 05:01	07/15/19
L1931018-03	RAA02_071519	AIR	BRONX, NY	07/15/19 05:07	07/15/19

Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

Case Narrative (continued)

Report Revision

July 25, 2019: This report replaces the one previously issued on July 18, 2019. The report has been amended to change sample IDs for L1931018-01 and L1931018-02 at the request of the client.

Volatile Organics in Air

Canisters were released from the laboratory on July 15, 2019. The canister certification results are provided as an addendum.

L1931018-01 & -02 : The canister vacuum measured on receipt at the laboratory was > 15 in. Hg. Prior to sample analysis, the canisters were pressurized with UHP Nitrogen in order to facilitate the transfer of sample to the Gas Chromatograph. The addition of Nitrogen resulted in a dilution of the samples. The reporting limits have been elevated accordingly.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 07/25/19

AIR

Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-01 D
 Client ID: RSSV08_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:04
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 07/17/19 05:04
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.601	0.354	--	2.97	1.75	--		1.772
Chloromethane	ND	0.354	--	ND	0.731	--		1.772
Freon-114	ND	0.354	--	ND	2.47	--		1.772
Vinyl chloride	ND	0.354	--	ND	0.905	--		1.772
1,3-Butadiene	ND	0.354	--	ND	0.783	--		1.772
Bromomethane	ND	0.354	--	ND	1.37	--		1.772
Chloroethane	ND	0.354	--	ND	0.934	--		1.772
Ethanol	270	8.86	--	509	16.7	--		1.772
Vinyl bromide	ND	0.354	--	ND	1.55	--		1.772
Acetone	7.99	1.77	--	19.0	4.20	--		1.772
Trichlorofluoromethane	ND	0.354	--	ND	1.99	--		1.772
Isopropanol	1.20	0.886	--	2.95	2.18	--		1.772
1,1-Dichloroethene	ND	0.354	--	ND	1.40	--		1.772
Tertiary butyl Alcohol	3.06	0.886	--	9.28	2.69	--		1.772
Methylene chloride	ND	0.886	--	ND	3.08	--		1.772
3-Chloropropene	ND	0.354	--	ND	1.11	--		1.772
Carbon disulfide	2.38	0.354	--	7.41	1.10	--		1.772
Freon-113	ND	0.354	--	ND	2.71	--		1.772
trans-1,2-Dichloroethene	ND	0.354	--	ND	1.40	--		1.772
1,1-Dichloroethane	ND	0.354	--	ND	1.43	--		1.772
Methyl tert butyl ether	ND	0.354	--	ND	1.28	--		1.772
2-Butanone	8.07	0.886	--	23.8	2.61	--		1.772
cis-1,2-Dichloroethene	ND	0.354	--	ND	1.40	--		1.772



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-01 D
 Client ID: RSSV08_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:04
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.886	--	ND	3.19	--		1.772
Chloroform	0.633	0.354	--	3.09	1.73	--		1.772
Tetrahydrofuran	ND	0.886	--	ND	2.61	--		1.772
1,2-Dichloroethane	ND	0.354	--	ND	1.43	--		1.772
n-Hexane	4.16	0.354	--	14.7	1.25	--		1.772
1,1,1-Trichloroethane	ND	0.354	--	ND	1.93	--		1.772
Benzene	2.38	0.354	--	7.60	1.13	--		1.772
Carbon tetrachloride	4.32	0.354	--	27.2	2.23	--		1.772
Cyclohexane	2.51	0.354	--	8.64	1.22	--		1.772
1,2-Dichloropropane	ND	0.354	--	ND	1.64	--		1.772
Bromodichloromethane	ND	0.354	--	ND	2.37	--		1.772
1,4-Dioxane	ND	0.354	--	ND	1.28	--		1.772
Trichloroethene	ND	0.354	--	ND	1.90	--		1.772
2,2,4-Trimethylpentane	5.13	0.354	--	24.0	1.65	--		1.772
Heptane	4.53	0.354	--	18.6	1.45	--		1.772
cis-1,3-Dichloropropene	ND	0.354	--	ND	1.61	--		1.772
4-Methyl-2-pentanone	ND	0.886	--	ND	3.63	--		1.772
trans-1,3-Dichloropropene	ND	0.354	--	ND	1.61	--		1.772
1,1,2-Trichloroethane	ND	0.354	--	ND	1.93	--		1.772
Toluene	16.8	0.354	--	63.3	1.33	--		1.772
2-Hexanone	2.89	0.354	--	11.8	1.45	--		1.772
Dibromochloromethane	ND	0.354	--	ND	3.02	--		1.772
1,2-Dibromoethane	ND	0.354	--	ND	2.72	--		1.772
Tetrachloroethene	2.53	0.354	--	17.2	2.40	--		1.772
Chlorobenzene	ND	0.354	--	ND	1.63	--		1.772
Ethylbenzene	4.54	0.354	--	19.7	1.54	--		1.772



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-01 D
 Client ID: RSSV08_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:04
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	17.1	0.709	--	74.3	3.08	--		1.772
Bromoform	ND	0.354	--	ND	3.66	--		1.772
Styrene	ND	0.354	--	ND	1.51	--		1.772
1,1,2,2-Tetrachloroethane	ND	0.354	--	ND	2.43	--		1.772
o-Xylene	6.75	0.354	--	29.3	1.54	--		1.772
4-Ethyltoluene	1.32	0.354	--	6.49	1.74	--		1.772
1,3,5-Trimethylbenzene	2.20	0.354	--	10.8	1.74	--		1.772
1,2,4-Trimethylbenzene	7.75	0.354	--	38.1	1.74	--		1.772
Benzyl chloride	ND	0.354	--	ND	1.83	--		1.772
1,3-Dichlorobenzene	ND	0.354	--	ND	2.13	--		1.772
1,4-Dichlorobenzene	ND	0.354	--	ND	2.13	--		1.772
1,2-Dichlorobenzene	ND	0.354	--	ND	2.13	--		1.772
1,2,4-Trichlorobenzene	ND	0.354	--	ND	2.63	--		1.772
Hexachlorobutadiene	ND	0.354	--	ND	3.78	--		1.772

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	80		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	102		60-140



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-02 D
 Client ID: RSSV09_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:01
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 07/17/19 05:44
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.592	0.392	--	2.93	1.94	--		1.961
Chloromethane	0.463	0.392	--	0.956	0.809	--		1.961
Freon-114	ND	0.392	--	ND	2.74	--		1.961
Vinyl chloride	ND	0.392	--	ND	1.00	--		1.961
1,3-Butadiene	ND	0.392	--	ND	0.867	--		1.961
Bromomethane	ND	0.392	--	ND	1.52	--		1.961
Chloroethane	ND	0.392	--	ND	1.03	--		1.961
Ethanol	43.9	9.80	--	82.7	18.5	--		1.961
Vinyl bromide	ND	0.392	--	ND	1.71	--		1.961
Acetone	4.14	1.96	--	9.83	4.66	--		1.961
Trichlorofluoromethane	ND	0.392	--	ND	2.20	--		1.961
Isopropanol	ND	0.980	--	ND	2.41	--		1.961
1,1-Dichloroethene	ND	0.392	--	ND	1.55	--		1.961
Tertiary butyl Alcohol	3.84	0.980	--	11.6	2.97	--		1.961
Methylene chloride	1.27	0.980	--	4.41	3.40	--		1.961
3-Chloropropene	ND	0.392	--	ND	1.23	--		1.961
Carbon disulfide	2.29	0.392	--	7.13	1.22	--		1.961
Freon-113	ND	0.392	--	ND	3.00	--		1.961
trans-1,2-Dichloroethene	ND	0.392	--	ND	1.55	--		1.961
1,1-Dichloroethane	ND	0.392	--	ND	1.59	--		1.961
Methyl tert butyl ether	ND	0.392	--	ND	1.41	--		1.961
2-Butanone	6.20	0.980	--	18.3	2.89	--		1.961
cis-1,2-Dichloroethene	ND	0.392	--	ND	1.55	--		1.961



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-02 D
 Client ID: RSSV09_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:01
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.980	--	ND	3.53	--		1.961
Chloroform	ND	0.392	--	ND	1.91	--		1.961
Tetrahydrofuran	ND	0.980	--	ND	2.89	--		1.961
1,2-Dichloroethane	ND	0.392	--	ND	1.59	--		1.961
n-Hexane	14.5	0.392	--	51.1	1.38	--		1.961
1,1,1-Trichloroethane	ND	0.392	--	ND	2.14	--		1.961
Benzene	9.65	0.392	--	30.8	1.25	--		1.961
Carbon tetrachloride	0.482	0.392	--	3.03	2.47	--		1.961
Cyclohexane	13.0	0.392	--	44.7	1.35	--		1.961
1,2-Dichloropropane	ND	0.392	--	ND	1.81	--		1.961
Bromodichloromethane	ND	0.392	--	ND	2.63	--		1.961
1,4-Dioxane	ND	0.392	--	ND	1.41	--		1.961
Trichloroethene	ND	0.392	--	ND	2.11	--		1.961
2,2,4-Trimethylpentane	9.68	0.392	--	45.2	1.83	--		1.961
Heptane	14.6	0.392	--	59.8	1.61	--		1.961
cis-1,3-Dichloropropene	ND	0.392	--	ND	1.78	--		1.961
4-Methyl-2-pentanone	ND	0.980	--	ND	4.02	--		1.961
trans-1,3-Dichloropropene	ND	0.392	--	ND	1.78	--		1.961
1,1,2-Trichloroethane	ND	0.392	--	ND	2.14	--		1.961
Toluene	58.1	0.392	--	219	1.48	--		1.961
2-Hexanone	ND	0.392	--	ND	1.61	--		1.961
Dibromochloromethane	ND	0.392	--	ND	3.34	--		1.961
1,2-Dibromoethane	ND	0.392	--	ND	3.01	--		1.961
Tetrachloroethene	3.66	0.392	--	24.8	2.66	--		1.961
Chlorobenzene	ND	0.392	--	ND	1.81	--		1.961
Ethylbenzene	10.8	0.392	--	46.9	1.70	--		1.961



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-02 D
 Client ID: RSSV09_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:01
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	39.6	0.784	--	172	3.41	--		1.961
Bromoform	ND	0.392	--	ND	4.05	--		1.961
Styrene	ND	0.392	--	ND	1.67	--		1.961
1,1,2,2-Tetrachloroethane	ND	0.392	--	ND	2.69	--		1.961
o-Xylene	14.4	0.392	--	62.5	1.70	--		1.961
4-Ethyltoluene	2.55	0.392	--	12.5	1.93	--		1.961
1,3,5-Trimethylbenzene	3.58	0.392	--	17.6	1.93	--		1.961
1,2,4-Trimethylbenzene	12.8	0.392	--	62.9	1.93	--		1.961
Benzyl chloride	ND	0.392	--	ND	2.03	--		1.961
1,3-Dichlorobenzene	ND	0.392	--	ND	2.36	--		1.961
1,4-Dichlorobenzene	ND	0.392	--	ND	2.36	--		1.961
1,2-Dichlorobenzene	ND	0.392	--	ND	2.36	--		1.961
1,2,4-Trichlorobenzene	ND	0.392	--	ND	2.91	--		1.961
Hexachlorobutadiene	ND	0.392	--	ND	4.18	--		1.961

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	110		60-140



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-03
 Client ID: RAA02_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:07
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 07/16/19 19:44
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.478	0.200	--	2.36	0.989	--		1
Chloromethane	0.618	0.200	--	1.28	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	9.01	5.00	--	17.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.52	1.00	--	8.36	2.38	--		1
Trichlorofluoromethane	0.238	0.200	--	1.34	1.12	--		1
Isopropanol	0.814	0.500	--	2.00	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

SAMPLE RESULTS

Lab ID: L1931018-03
 Client ID: RAA02_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:07
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.270	0.200	--	0.952	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.268	0.200	--	0.856	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	0.270	0.200	--	1.26	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.596	0.200	--	2.25	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name: 404 EXTERIOR ST**Lab Number:** L1931018**Project Number:** 170487001**Report Date:** 07/25/19**SAMPLE RESULTS**

Lab ID: L1931018-03
 Client ID: RAA02_071519
 Sample Location: BRONX, NY

Date Collected: 07/15/19 05:07
 Date Received: 07/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	92		60-140



Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/16/19 18:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1260608-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/16/19 18:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1260608-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1



Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/16/19 18:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-03 Batch: WG1260608-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1260608-3								
Propylene	81		-		70-130	-		
Dichlorodifluoromethane	88		-		70-130	-		
Chloromethane	97		-		70-130	-		
Freon-114	91		-		70-130	-		
Vinyl chloride	94		-		70-130	-		
1,3-Butadiene	108		-		70-130	-		
Bromomethane	93		-		70-130	-		
Chloroethane	93		-		70-130	-		
Ethanol	110		-		40-160	-		
Vinyl bromide	89		-		70-130	-		
Acetone	77		-		40-160	-		
Trichlorofluoromethane	97		-		70-130	-		
Isopropanol	82		-		40-160	-		
1,1-Dichloroethene	105		-		70-130	-		
Tertiary butyl Alcohol	102		-		70-130	-		
Methylene chloride	118		-		70-130	-		
3-Chloropropene	100		-		70-130	-		
Carbon disulfide	103		-		70-130	-		
Freon-113	103		-		70-130	-		
trans-1,2-Dichloroethene	99		-		70-130	-		
1,1-Dichloroethane	99		-		70-130	-		
Methyl tert butyl ether	92		-		70-130	-		
Vinyl acetate	95		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Lab Number: L1931018

Project Number: 170487001

Report Date: 07/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1260608-3								
2-Butanone	87		-		70-130	-		
cis-1,2-Dichloroethene	91		-		70-130	-		
Ethyl Acetate	105		-		70-130	-		
Chloroform	90		-		70-130	-		
Tetrahydrofuran	77		-		70-130	-		
1,2-Dichloroethane	110		-		70-130	-		
n-Hexane	87		-		70-130	-		
1,1,1-Trichloroethane	105		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	113		-		70-130	-		
Cyclohexane	104		-		70-130	-		
1,2-Dichloropropane	105		-		70-130	-		
Bromodichloromethane	101		-		70-130	-		
1,4-Dioxane	97		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	107		-		70-130	-		
Heptane	110		-		70-130	-		
cis-1,3-Dichloropropene	103		-		70-130	-		
4-Methyl-2-pentanone	113		-		70-130	-		
trans-1,3-Dichloropropene	91		-		70-130	-		
1,1,2-Trichloroethane	103		-		70-130	-		
Toluene	94		-		70-130	-		
2-Hexanone	109		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Project Number: 170487001

Lab Number: L1931018

Report Date: 07/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1260608-3								
Dibromochloromethane	101		-		70-130	-		
1,2-Dibromoethane	94		-		70-130	-		
Tetrachloroethene	89		-		70-130	-		
Chlorobenzene	97		-		70-130	-		
Ethylbenzene	97		-		70-130	-		
p/m-Xylene	100		-		70-130	-		
Bromoform	114		-		70-130	-		
Styrene	92		-		70-130	-		
1,1,2,2-Tetrachloroethane	100		-		70-130	-		
o-Xylene	102		-		70-130	-		
4-Ethyltoluene	93		-		70-130	-		
1,3,5-Trimethylbenzene	96		-		70-130	-		
1,2,4-Trimethylbenzene	97		-		70-130	-		
Benzyl chloride	106		-		70-130	-		
1,3-Dichlorobenzene	98		-		70-130	-		
1,4-Dichlorobenzene	108		-		70-130	-		
1,2-Dichlorobenzene	91		-		70-130	-		
1,2,4-Trichlorobenzene	89		-		70-130	-		
Hexachlorobutadiene	87		-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1260608-5 QC Sample: L1931018-02 Client ID: RSSV09_071519						
Dichlorodifluoromethane	0.592	0.590	ppbV	0		25
Chloromethane	0.463	0.488	ppbV	5		25
Freon-114	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	43.9	43.5	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	4.14	4.39	ppbV	6		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Tertiary butyl Alcohol	3.84	3.93	ppbV	2		25
Methylene chloride	1.27	1.25	ppbV	2		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	2.29	2.27	ppbV	1		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Project Number: 170487001

Lab Number: L1931018

Report Date: 07/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1260608-5 QC Sample: L1931018-02 Client ID: RSSV09_071519						
2-Butanone	6.20	6.15	ppbV	1		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	14.5	13.7	ppbV	6		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Benzene	9.65	9.87	ppbV	2		25
Carbon tetrachloride	0.482	0.494	ppbV	2		25
Cyclohexane	13.0	12.9	ppbV	1		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
Trichloroethene	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	9.68	9.61	ppbV	1		25
Heptane	14.6	14.4	ppbV	1		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR ST

Project Number: 170487001

Lab Number: L1931018

Report Date: 07/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1260608-5 QC Sample: L1931018-02 Client ID: RSSV09_071519						
Toluene	58.1	59.5	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Tetrachloroethene	3.66	3.95	ppbV	8		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	10.8	11.1	ppbV	3		25
p/m-Xylene	39.6	39.1	ppbV	1		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	14.4	14.5	ppbV	1		25
4-Ethyltoluene	2.55	2.74	ppbV	7		25
1,3,5-Trimethylbenzene	3.58	3.58	ppbV	0		25
1,2,4-Trimethylbenzene	12.8	13.5	ppbV	5		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: 404 EXTERIOR ST

Project Number: 170487001

Serial_No:07251911:13
Lab Number: L1931018

Report Date: 07/25/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1931018-01	RSSV08_071519	0396	Flow 5	07/15/19	296913		-	-	-	Pass	4.5	0.5	160
L1931018-01	RSSV08_071519	195	2.7L Can	07/15/19	296913	L1930221-05	Pass	-29.3	-17.7	-	-	-	-
L1931018-02	RSSV09_071519	0435	Flow 5	07/15/19	296913		-	-	-	Pass	4.5	4.6	2
L1931018-02	RSSV09_071519	411	2.7L Can	07/15/19	296913	L1930221-05	Pass	-29.2	-18.4	-	-	-	-
L1931018-03	RAA02_071519	01248	FLOW 5	07/15/19	296913		-	-	-	Pass	4.5	4.6	2
L1931018-03	RAA02_071519	202	2.7L Can	07/15/19	296913	L1930221-05	Pass	-29.2	-7.5	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 07/11/19 21:04
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	100		60-140
chlorobenzene-d5	100		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/11/19 21:04
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
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Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1930221
Report Date: 07/25/19

Air Canister Certification Results

Lab ID: L1930221-05
 Client ID: CAN 2238 SHELF 8
 Sample Location:

Date Collected: 06/11/19 09:00
 Date Received: 07/11/19
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	99		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	100		60-140



Project Name: 404 EXTERIOR ST

Project Number: 170487001

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Absent

Container Information**Container ID** **Container Type**

Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
NA	NA			Y	Absent		TO15-LL(30)
NA	NA			Y	Absent		TO15-LL(30)

L1931018-01A Canister - 2.7 Liter

L1931018-02A Canister - 2.7 Liter

Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1.8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: Data Usability Report



Project Name: 404 EXTERIOR ST
Project Number: 170487001

Lab Number: L1931018
Report Date: 07/25/19

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



AIR ANALYSIS

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
 TEL: 508-822-9300 FAX: 508-822-3288

PAGE 1 OF 1

Date Rec'd in Lab: 7-16-19

ALPHA Job #: L1931018

Project Information

Project Name: 404 EXTERIOR ST
 Project Location: BRONX, NY
 Project #: 170487001
 Project Manager: JULIA LEUNG
 ALPHA Quote #:

Turn-Around Time

Standard RUSH (only confirmed if pre-approved)
 Date Due: Time:

Report Information - Data Deliverables

FAX ADEx
 Criteria Checker:
(Default based on Regulatory Criteria Indicated)
 Other Formats:
 EMAIL (standard pdf report)
 Additional Deliverables:
 Report to: (if different than Project Manager)

Billing Information

Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Client Information

Client: LANGAN ENG
 Address: 360 W 3RD STREET
NEW YORK, NY
 Phone: 212 479 5400
 Fax:
 Email: jleung@langan.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:
 Project-Specific Target Compound List:

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION				Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH <small>Subtract Non-petroleum HCs</small>	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum											
31018-01	RSV03-071519	7/15/19	9:04	9:04	-29.99	-17.88	SV	SS	2.7L	195	390	X				
02	RSV04-071519	↓	9:01	9:01	-30.01	-18.51	↓	↓	↓	411	455	X				
03	RAA02-071519	↓	9:07	9:07	-20.10	-7.03	↓	↓	↓	202	1248	X				
					5:07											
					5:01											
					5:07											

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
 SV = Soil Vapor/Landfill Gas/SVE
 Other = Please Specify

Container Type

Relinquished By: Seth S. Eger Date/Time: 7/15/19 5:11 pm
 Received By: Romek Jackson AAL Date/Time: 7/15/19 7:20
7/16/19 0070 Chad AAL 7-16-19 0230

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



ANALYTICAL REPORT

Lab Number:	L1901689
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/21/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1901689-01	RMW18_011419	WATER	BRONX, NY	01/14/19 14:27	01/14/19
L1901689-02	RMW22_011419	WATER	BRONX, NY	01/14/19 12:22	01/14/19
L1901689-03	GWFB01_011419	WATER	BRONX, NY	01/14/19 13:00	01/14/19
L1901689-04	GWTB01_011419	WATER	BRONX, NY	01/14/19 00:00	01/14/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Perfluorinated Alkyl Acids by Isotope Dilution

L1901689-03 and WG1198461QC: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1198573-11: The continuing calibration standard, associated with L1901689 as well as the associated QC, had the response for the extracted internal standard Perfluoro[1,2-¹³C₂]Tetradecanoic Acid (M2PFTEDA) (158.7%) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria, therefore no further action was taken.

Total Metals


The WG1197906-3 MS recoveries for calcium (30%) and iron (0%), performed on L1901689-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

Dissolved Metals

The WG1197826-3 MS recoveries for calcium (40%) and sodium (64%), performed on L1901689-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 01/21/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 10:37
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 11:05
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-04
 Client ID: GWTB01_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 00:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 11:33
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-04
 Client ID: GWTB01_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 00:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-04
 Client ID: GWTB01_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 00:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04 Batch: WG1198696-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04 Batch: WG1198696-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04 Batch: WG1198696-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1198696-3 WG1198696-4								
Methylene chloride	92		91		70-130	1		20
1,1-Dichloroethane	96		98		70-130	2		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	90		93		63-132	3		20
1,2-Dichloropropane	96		100		70-130	4		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	95		98		70-130	3		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	72		75		62-150	4		20
1,2-Dichloroethane	95		100		70-130	5		20
1,1,1-Trichloroethane	94		95		67-130	1		20
Bromodichloromethane	96		98		67-130	2		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	93		97		70-130	4		20
1,1-Dichloropropene	89		92		70-130	3		20
Bromoform	99		100		54-136	1		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	91		94		70-130	3		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	54	Q	55	Q	64-130	2		20
Bromomethane	43		29	Q	39-139	39	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1198696-3 WG1198696-4								
Vinyl chloride	75		75		55-140	0		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	78		80		61-145	3		20
trans-1,2-Dichloroethene	90		94		70-130	4		20
Trichloroethene	93		96		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	93		100		63-130	7		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	95		97		70-130	2		20
Dibromomethane	94		98		70-130	4		20
1,2,3-Trichloropropane	100		110		64-130	10		20
Acrylonitrile	92		100		70-130	8		20
Styrene	90		95		70-130	5		20
Dichlorodifluoromethane	56		57		36-147	2		20
Acetone	83		75		58-148	10		20
Carbon disulfide	81		82		51-130	1		20
2-Butanone	93		98		63-138	5		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	88		110		59-130	22	Q	20
2-Hexanone	80		96		57-130	18		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1198696-3 WG1198696-4								
Bromochloromethane	99		100		70-130	1		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	96		100		70-130	4		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	98		100		53-136	2		20
sec-Butylbenzene	99		100		70-130	1		20
tert-Butylbenzene	97		98		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	88		100		41-144	13		20
Hexachlorobutadiene	80		80		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	96		97		70-130	1		20
Naphthalene	84		93		70-130	10		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	86		91		70-130	6		20
1,2,4-Trichlorobenzene	88		89		70-130	1		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	100		100		56-162	0		20
p-Diethylbenzene	93		95		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1198696-3 WG1198696-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	88		89		70-130	1		20
Ethyl ether	86		91		59-134	6		20
trans-1,4-Dichloro-2-butene	96		100		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	99		97		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 14:59
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.8	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	65		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 19:03
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.03	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.10	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.08	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Acenaphthylene	0.09	J	ug/l	0.10	0.01	1
Anthracene	0.08	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	0.07	J	ug/l	0.10	0.01	1
Phenanthrene	0.26		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.16		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.08	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01

Date Collected: 01/14/19 14:27

Client ID: RMW18_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	66		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 15:54
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.9	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	63		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/16/19 16:43
 Analyst: PS

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	147	33.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	20		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 19:26
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.11		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.09	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.22		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.08	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.19		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.27		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.11		ug/l	0.10	0.01	1
Chrysene	0.06	J	ug/l	0.10	0.01	1
Acenaphthylene	0.11		ug/l	0.10	0.01	1
Anthracene	0.05	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.33		ug/l	0.10	0.01	1
Fluorene	0.09	J	ug/l	0.10	0.01	1
Phenanthrene	0.13		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.09	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.31		ug/l	0.10	0.01	1
Pyrene	0.10	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02

Date Collected: 01/14/19 12:22

Client ID: RMW22_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	50		10-120
4-Terphenyl-d14	68		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
Client ID: RMW22_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
Date Received: 01/14/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 02:43
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	2.42		ng/l	1.80	0.336	1
Perfluoropentanoic Acid (PFPeA)	2.34		ng/l	1.80	0.417	1
Perfluorobutanesulfonic Acid (PFBS)	0.773	J	ng/l	1.80	0.342	1
Perfluorohexanoic Acid (PFHxA)	1.53	J	ng/l	1.80	0.442	1
Perfluoroheptanoic Acid (PFHpA)	0.982	J	ng/l	1.80	0.334	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.80	0.392	1
Perfluorooctanoic Acid (PFOA)	3.02		ng/l	1.80	0.414	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	0.914	J	ng/l	1.80	0.174	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.80	0.468	1
Perfluorononanoic Acid (PFNA)	0.680	J	ng/l	1.80	0.392	1
Perfluorooctanesulfonic Acid (PFOS)	5.47		ng/l	1.80	0.504	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.80	0.558	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.80	0.262	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.80	0.225	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.80	0.381	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.80	0.347	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.80	0.500	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.70	J	ng/l	1.80	0.335	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.80	0.532	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.80	0.282	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.80	0.888	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	69		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	83		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	59		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	74		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	162		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	84		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	103		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	103		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	10		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	92		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	76		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	116		33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-03
 Client ID: GWFB01_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 13:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/16/19 17:09
 Analyst: PS

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 18:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	147	33.2	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			27		15-110	

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-03
Client ID: GWFB01_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 13:00
Date Received: 01/14/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 00:31
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.77	0.330	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.77	0.410	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.77	0.336	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.77	0.435	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.77	0.329	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.77	0.385	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.77	0.406	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.05	J	ng/l	1.77	0.171	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.77	0.459	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.77	0.385	1
Perfluorooctanesulfonic Acid (PFOS)	0.972	J	ng/l	1.77	0.495	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.77	0.548	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.77	0.257	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.77	0.221	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.77	0.374	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.77	0.341	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.77	0.491	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.77	0.329	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.77	0.523	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.77	0.277	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.77	0.873	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-03
 Client ID: GWFB01_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 13:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	112		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	127		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	108		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	96		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	104		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	115		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	112		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	102		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	124		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	120		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	106		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	86		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	107		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	125		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	35		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	87		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	107		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	155	Q	33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/15/19 09:45
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 18:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1197576-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/15/19 09:45
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 18:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1197576-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 01/15/19 09:45
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/14/19 18:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1197576-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	75		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/15/19 11:22
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1197577-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/15/19 11:22
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 18:46

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1197577-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	86		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D-SIM
Analytical Date: 01/16/19 14:05
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 01/15/19 18:30

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02-03 Batch: WG1197902-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	18		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 01/19/19 20:56
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 02-03 Batch: WG1198461-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.373
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.464
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.380
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.492
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.372
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.436
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.460
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.28	J	ng/l	2.00	0.194
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.520
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.436
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.560
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.620
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.291
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.250
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.424
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.386
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.556
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.373
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.592
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.314
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.988

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 122,537(M)
Analytical Date: 01/19/19 20:56
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 02-03 Batch: WG1198461-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	115		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	123		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	124		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	100		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	110		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	111		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	117		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	108		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	113		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	136		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	118		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	112		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	134		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1197576-2 WG1197576-3								
Acenaphthene	60		72		37-111	18		30
1,2,4-Trichlorobenzene	65		85		39-98	27		30
Hexachlorobenzene	61		73		40-140	18		30
Bis(2-chloroethyl)ether	61		74		40-140	19		30
2-Chloronaphthalene	67		77		40-140	14		30
1,2-Dichlorobenzene	67		72		40-140	7		30
1,3-Dichlorobenzene	61		71		40-140	15		30
1,4-Dichlorobenzene	61		71		36-97	15		30
3,3'-Dichlorobenzidine	66		72		40-140	9		30
2,4-Dinitrotoluene	63		77		48-143	20		30
2,6-Dinitrotoluene	70		87		40-140	22		30
Fluoranthene	68		80		40-140	16		30
4-Chlorophenyl phenyl ether	65		76		40-140	16		30
4-Bromophenyl phenyl ether	64		77		40-140	18		30
Bis(2-chloroisopropyl)ether	70		76		40-140	8		30
Bis(2-chloroethoxy)methane	71		90		40-140	24		30
Hexachlorobutadiene	59		68		40-140	14		30
Hexachlorocyclopentadiene	49		67		40-140	31	Q	30
Hexachloroethane	65		74		40-140	13		30
Isophorone	74		87		40-140	16		30
Naphthalene	65		74		40-140	13		30
Nitrobenzene	68		80		40-140	16		30
NDPA/DPA	70		78		40-140	11		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1197576-2 WG1197576-3								
n-Nitrosodi-n-propylamine	76		88		29-132	15		30
Bis(2-ethylhexyl)phthalate	69		78		40-140	12		30
Butyl benzyl phthalate	72		89		40-140	21		30
Di-n-butylphthalate	66		76		40-140	14		30
Di-n-octylphthalate	77		85		40-140	10		30
Diethyl phthalate	69		79		40-140	14		30
Dimethyl phthalate	74		88		40-140	17		30
Benzo(a)anthracene	70		82		40-140	16		30
Benzo(a)pyrene	86		95		40-140	10		30
Benzo(b)fluoranthene	83		102		40-140	21		30
Benzo(k)fluoranthene	84		92		40-140	9		30
Chrysene	67		81		40-140	19		30
Acenaphthylene	69		82		45-123	17		30
Anthracene	67		80		40-140	18		30
Benzo(ghi)perylene	67		81		40-140	19		30
Fluorene	65		75		40-140	14		30
Phenanthrene	64		76		40-140	17		30
Dibenzo(a,h)anthracene	65		82		40-140	23		30
Indeno(1,2,3-cd)pyrene	63		73		40-140	15		30
Pyrene	59		78		26-127	28		30
Biphenyl	64		73		40-140	13		30
4-Chloroaniline	63		66		40-140	5		30
2-Nitroaniline	60		80		52-143	29		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1197576-2 WG1197576-3								
3-Nitroaniline	66		75		25-145	13		30
4-Nitroaniline	66		76		51-143	14		30
Dibenzofuran	62		72		40-140	15		30
2-Methylnaphthalene	64		78		40-140	20		30
1,2,4,5-Tetrachlorobenzene	52		72		2-134	32	Q	30
Acetophenone	73		81		39-129	10		30
2,4,6-Trichlorophenol	71		86		30-130	19		30
p-Chloro-m-cresol	70		89		23-97	24		30
2-Chlorophenol	67		78		27-123	15		30
2,4-Dichlorophenol	78		95		30-130	20		30
2,4-Dimethylphenol	74		96		30-130	26		30
2-Nitrophenol	72		88		30-130	20		30
4-Nitrophenol	86	Q	98	Q	10-80	13		30
2,4-Dinitrophenol	63		68		20-130	8		30
4,6-Dinitro-o-cresol	66		74		20-164	11		30
Pentachlorophenol	71		83		9-103	16		30
Phenol	44		54		12-110	20		30
2-Methylphenol	76		82		30-130	8		30
3-Methylphenol/4-Methylphenol	81		89		30-130	9		30
2,4,5-Trichlorophenol	74		87		30-130	16		30
Benzoic Acid	46		45		10-164	2		30
Benzyl Alcohol	74		86		26-116	15		30
Carbazole	73		88		55-144	19		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1197576-2 WG1197576-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	59		76		21-120
Phenol-d6	43		53		10-120
Nitrobenzene-d5	68		77		23-120
2-Fluorobiphenyl	63		75		15-120
2,4,6-Tribromophenol	73		81		10-120
4-Terphenyl-d14	56		66		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1197577-2 WG1197577-3								
Acenaphthene	74		78		40-140	5		40
2-Chloronaphthalene	76		82		40-140	8		40
Fluoranthene	92		95		40-140	3		40
Hexachlorobutadiene	69		76		40-140	10		40
Naphthalene	68		76		40-140	11		40
Benzo(a)anthracene	86		89		40-140	3		40
Benzo(a)pyrene	103		107		40-140	4		40
Benzo(b)fluoranthene	92		95		40-140	3		40
Benzo(k)fluoranthene	98		101		40-140	3		40
Chrysene	89		92		40-140	3		40
Acenaphthylene	83		89		40-140	7		40
Anthracene	83		87		40-140	5		40
Benzo(ghi)perylene	93		95		40-140	2		40
Fluorene	79		83		40-140	5		40
Phenanthrene	77		81		40-140	5		40
Dibenzo(a,h)anthracene	96		99		40-140	3		40
Indeno(1,2,3-cd)pyrene	103		106		40-140	3		40
Pyrene	89		91		40-140	2		40
2-Methylnaphthalene	73		80		40-140	9		40
Pentachlorophenol	71		73		40-140	3		40
Hexachlorobenzene	76		80		40-140	5		40
Hexachloroethane	69		75		40-140	8		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1197577-2 WG1197577-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	52		57		21-120
Phenol-d6	41		45		10-120
Nitrobenzene-d5	78		85		23-120
2-Fluorobiphenyl	75		81		15-120
2,4,6-Tribromophenol	94		102		10-120
4-Terphenyl-d14	83		84		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 02-03 Batch: WG1197902-2 WG1197902-3								
1,4-Dioxane	107		111		40-140	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	27		24		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 02-03 Batch: WG1198461-2 WG1198461-3								
Perfluorobutanoic Acid (PFBA)	84		93		67-148	10		30
Perfluoropentanoic Acid (PFPeA)	88		96		63-161	9		30
Perfluorobutanesulfonic Acid (PFBS)	82		90		65-157	9		30
Perfluorohexanoic Acid (PFHxA)	90		98		69-168	9		30
Perfluoroheptanoic Acid (PFHpA)	78		84		58-159	7		30
Perfluorohexanesulfonic Acid (PFHxS)	84		92		69-177	9		30
Perfluorooctanoic Acid (PFOA)	82		88		63-159	7		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	102		101		49-187	1		30
Perfluoroheptanesulfonic Acid (PFHpS)	77		95		61-179	21		30
Perfluorononanoic Acid (PFNA)	84		90		68-171	7		30
Perfluorooctanesulfonic Acid (PFOS)	68		76		52-151	11		30
Perfluorodecanoic Acid (PFDA)	86		96		63-171	11		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	90		100		56-173	11		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	78		82		60-166	5		30
Perfluoroundecanoic Acid (PFUnA)	76		82		60-153	8		30
Perfluorodecanesulfonic Acid (PFDS)	88		89		38-156	1		30
Perfluorooctanesulfonamide (FOSA)	79		90		46-170	13		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	80		84		45-170	5		30
Perfluorododecanoic Acid (PFDoA)	78		86		67-153	10		30
Perfluorotridecanoic Acid (PFTrDA)	95		115		48-158	19		30
Perfluorotetradecanoic Acid (PFTA)	94		98		59-182	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 02-03 Batch: WG1198461-2 WG1198461-3								

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		108		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		114		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	107		110		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		90		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		97		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	105		111		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		103		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		112		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	123		114		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	107		101		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	106		96		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	97		96		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	95		78		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	124		111		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	36		44		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	93		80		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	106		88		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	153	Q	154	Q	33-143

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
Client ID: RMW18_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
Date Received: 01/14/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/17/19 11:42
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/15/19 16:07
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/17/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
Client ID: RMW22_011419
Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
Date Received: 01/14/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/17/19 11:56
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/15/19 16:07
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/17/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/16/19 05:11
 Analyst: AWS

Extraction Method: EPA 3510C
 Extraction Date: 01/14/19 16:22
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/15/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/15/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG1197529-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	94		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1197529-2 WG1197529-3									
Aroclor 1016	88		85		40-140	4		50	A
Aroclor 1260	92		83		40-140	10		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		84		30-150	A
Decachlorobiphenyl	88		89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		87		30-150	B
Decachlorobiphenyl	115		95		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/17/19 12:01
 Analyst: SL

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01

Date Collected: 01/14/19 14:27

Client ID: RMW18_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	57		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 01:24
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/17/19 17:14

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	110		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/17/19 12:13
 Analyst: SL

Extraction Method: EPA 3510C
 Extraction Date: 01/15/19 16:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02

Date Collected: 01/14/19 12:22

Client ID: RMW22_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 01:43
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/17/19 17:14

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	100		30-150	A
DCAA	84		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/16/19 12:52
Analyst: SL

Extraction Method: EPA 3510C
Extraction Date: 01/14/19 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1197534-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A
Heptachlor	ND		ug/l	0.014	0.002	B
Endrin ketone	ND		ug/l	0.029	0.003	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 01/16/19 12:52
 Analyst: SL

Extraction Method: EPA 3510C
 Extraction Date: 01/14/19 16:03

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1197534-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	36		30-150	A
Decachlorobiphenyl	41		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		30-150	B
Decachlorobiphenyl	43		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/19/19 00:27
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/17/19 17:14

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1198662-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	82		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1197534-2 WG1197534-3									
Delta-BHC	88		78		30-150	12		20	A
Lindane	84		75		30-150	11		20	A
Alpha-BHC	92		80		30-150	14		20	A
Beta-BHC	95		88		30-150	8		20	A
Heptachlor	88		78		30-150	13		20	A
Aldrin	87		77		30-150	12		20	A
Heptachlor epoxide	96		85		30-150	11		20	A
Endrin	94		82		30-150	13		20	A
Endrin aldehyde	84		73		30-150	14		20	A
Endrin ketone	98		86		30-150	14		20	A
Dieldrin	98		86		30-150	13		20	A
4,4'-DDE	92		81		30-150	13		20	A
4,4'-DDD	91		81		30-150	12		20	A
4,4'-DDT	92		80		30-150	15		20	A
Endosulfan I	89		80		30-150	11		20	A
Endosulfan II	91		79		30-150	14		20	A
Endosulfan sulfate	94		83		30-150	11		20	A
Methoxychlor	101		91		30-150	10		20	A
cis-Chlordane	80		73		30-150	10		20	A
trans-Chlordane	82		73		30-150	10		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1197534-2 WG1197534-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	85		74		30-150	A
Decachlorobiphenyl	85		48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		76		30-150	B
Decachlorobiphenyl	93		49		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1198662-2 WG1198662-3									
2,4-D	93		93		30-150	0		25	A
2,4,5-T	107		105		30-150	2		25	A
2,4,5-TP (Silvex)	90		91		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	103		102		30-150	A
DCAA	95		96		30-150	B



METALS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

SAMPLE RESULTS

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	21.7		mg/l	0.0100	0.00327	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Antimony, Total	0.00104	J	mg/l	0.00400	0.00042	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00684		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Barium, Total	0.3261		mg/l	0.00050	0.00017	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00126		mg/l	0.00050	0.00010	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00029		mg/l	0.00020	0.00005	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Calcium, Total	137.		mg/l	0.100	0.0394	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Chromium, Total	0.03672		mg/l	0.00100	0.00017	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Cobalt, Total	0.01846		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Copper, Total	0.04824		mg/l	0.00100	0.00038	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Iron, Total	36.4		mg/l	0.0750	0.0191	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Lead, Total	0.2268		mg/l	0.00100	0.00034	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Magnesium, Total	43.2		mg/l	0.0700	0.0242	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Manganese, Total	2.553		mg/l	0.00100	0.00044	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:18	01/16/19 20:32	EPA 7470A	1,7470A	MG
Nickel, Total	0.03340		mg/l	0.00200	0.00055	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Potassium, Total	15.0		mg/l	0.100	0.0309	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Selenium, Total	0.00469	J	mg/l	0.00500	0.00173	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Silver, Total	0.00039	J	mg/l	0.00040	0.00016	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Sodium, Total	67.6		mg/l	0.100	0.0293	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Thallium, Total	0.00035	J	mg/l	0.00050	0.00014	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Vanadium, Total	0.04135		mg/l	0.00500	0.00157	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
Zinc, Total	0.1396		mg/l	0.01000	0.00341	1	01/15/19 16:37	01/16/19 14:10	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	0.036		mg/l	0.010	0.010	1		01/16/19 14:10	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00359	J	mg/l	0.0100	0.00327	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00130	J	mg/l	0.00400	0.00042	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00231		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1119		mg/l	0.00050	0.00017	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Calcium, Dissolved	130.		mg/l	0.100	0.0394	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00026	J	mg/l	0.00100	0.00017	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00274		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00078	J	mg/l	0.00100	0.00038	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Iron, Dissolved	5.45		mg/l	0.0750	0.0191	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00124		mg/l	0.00100	0.00034	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	36.9		mg/l	0.0700	0.0242	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.982		mg/l	0.00150	0.00044	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/16/19 14:45	01/16/19 21:11	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00184	J	mg/l	0.00200	0.00055	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Potassium, Dissolved	12.2		mg/l	0.100	0.0309	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Silver, Dissolved	0.00030	J	mg/l	0.00040	0.00016	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Sodium, Dissolved	73.5		mg/l	0.100	0.0293	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00439	J	mg/l	0.01000	0.00341	1	01/15/19 12:51	01/16/19 12:18	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2.22		mg/l	0.0100	0.00327	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Antimony, Total	0.00088	J	mg/l	0.00400	0.00042	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00532		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Barium, Total	0.1612		mg/l	0.00050	0.00017	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00015	J	mg/l	0.00050	0.00010	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Calcium, Total	55.3		mg/l	0.100	0.0394	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Chromium, Total	0.00468		mg/l	0.00100	0.00017	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00212		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Copper, Total	0.00900		mg/l	0.00100	0.00038	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Iron, Total	4.77		mg/l	0.0750	0.0191	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Lead, Total	0.2394		mg/l	0.00100	0.00034	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Magnesium, Total	13.2		mg/l	0.0700	0.0242	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Manganese, Total	1.111		mg/l	0.00100	0.00044	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Mercury, Total	0.00045		mg/l	0.00020	0.00006	1	01/16/19 12:18	01/16/19 20:33	EPA 7470A	1,7470A	MG
Nickel, Total	0.00627		mg/l	0.00200	0.00055	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Potassium, Total	7.15		mg/l	0.100	0.0309	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Silver, Total	0.00022	J	mg/l	0.00040	0.00016	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Sodium, Total	45.5		mg/l	0.100	0.0293	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00464	J	mg/l	0.00500	0.00157	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
Zinc, Total	0.02428		mg/l	0.01000	0.00341	1	01/15/19 16:37	01/16/19 14:14	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/16/19 14:14	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02
 Client ID: RMW22_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 12:22
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00770	J	mg/l	0.0100	0.00327	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00066	J	mg/l	0.00400	0.00042	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00392		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.09109		mg/l	0.00050	0.00017	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Calcium, Dissolved	53.0		mg/l	0.100	0.0394	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00035	J	mg/l	0.00100	0.00017	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00071		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00209		mg/l	0.00100	0.00038	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Iron, Dissolved	1.75		mg/l	0.0750	0.0191	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00323		mg/l	0.00100	0.00034	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	12.4		mg/l	0.0700	0.0242	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.015		mg/l	0.00150	0.00044	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/16/19 14:45	01/16/19 21:16	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00119	J	mg/l	0.00200	0.00055	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Potassium, Dissolved	6.83		mg/l	0.100	0.0309	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Sodium, Dissolved	44.0		mg/l	0.100	0.0293	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/15/19 12:51	01/16/19 14:18	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1197826-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Antimony, Dissolved	0.00056	J	mg/l	0.00400	0.00042	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Iron, Dissolved	0.0443	J	mg/l	0.0750	0.0191	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Manganese, Dissolved	0.00122	J	mg/l	0.00150	0.00044	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/15/19 12:51	01/16/19 11:57	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1197906-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Antimony, Total	0.00063	J	mg/l	0.00400	0.00042	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Method Blank Analysis Batch Quality Control

Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Chromium, Total	0.00025	J	mg/l	0.00100	0.00017	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Iron, Total	0.0294	J	mg/l	0.0750	0.0191	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/15/19 16:37	01/16/19 13:45	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1198190-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:18	01/16/19 20:16	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1198242-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/16/19 14:45	01/16/19 21:02	1,7470A	MG



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197826-2								
Aluminum, Dissolved	108		-		80-120	-		
Antimony, Dissolved	94		-		80-120	-		
Arsenic, Dissolved	106		-		80-120	-		
Barium, Dissolved	108		-		80-120	-		
Beryllium, Dissolved	107		-		80-120	-		
Cadmium, Dissolved	114		-		80-120	-		
Calcium, Dissolved	102		-		80-120	-		
Chromium, Dissolved	98		-		80-120	-		
Cobalt, Dissolved	102		-		80-120	-		
Copper, Dissolved	96		-		80-120	-		
Iron, Dissolved	116		-		80-120	-		
Lead, Dissolved	117		-		80-120	-		
Magnesium, Dissolved	108		-		80-120	-		
Manganese, Dissolved	102		-		80-120	-		
Nickel, Dissolved	103		-		80-120	-		
Potassium, Dissolved	105		-		80-120	-		
Selenium, Dissolved	111		-		80-120	-		
Silver, Dissolved	108		-		80-120	-		
Sodium, Dissolved	104		-		80-120	-		
Thallium, Dissolved	112		-		80-120	-		
Vanadium, Dissolved	101		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197826-2					
Zinc, Dissolved	111	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197906-2					
Aluminum, Total	102	-	80-120	-	
Antimony, Total	92	-	80-120	-	
Arsenic, Total	98	-	80-120	-	
Barium, Total	98	-	80-120	-	
Beryllium, Total	105	-	80-120	-	
Cadmium, Total	108	-	80-120	-	
Calcium, Total	96	-	80-120	-	
Chromium, Total	92	-	80-120	-	
Cobalt, Total	96	-	80-120	-	
Copper, Total	95	-	80-120	-	
Iron, Total	104	-	80-120	-	
Lead, Total	106	-	80-120	-	
Magnesium, Total	103	-	80-120	-	
Manganese, Total	96	-	80-120	-	
Nickel, Total	96	-	80-120	-	
Potassium, Total	100	-	80-120	-	
Selenium, Total	109	-	80-120	-	
Silver, Total	103	-	80-120	-	
Sodium, Total	99	-	80-120	-	
Thallium, Total	103	-	80-120	-	
Vanadium, Total	96	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1197906-2					
Zinc, Total	102	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1198190-2					
Mercury, Total	87	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1198242-2					
Mercury, Dissolved	101	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197826-3 QC Sample: L1901689-01 Client ID: RMW18_011419												
Aluminum, Dissolved	0.00359J	2	2.11	106		-	-		75-125	-		20
Antimony, Dissolved	0.00130J	0.5	0.5864	117		-	-		75-125	-		20
Arsenic, Dissolved	0.00231	0.12	0.1304	107		-	-		75-125	-		20
Barium, Dissolved	0.1119	2	2.159	102		-	-		75-125	-		20
Beryllium, Dissolved	ND	0.05	0.05368	107		-	-		75-125	-		20
Cadmium, Dissolved	ND	0.051	0.05450	107		-	-		75-125	-		20
Calcium, Dissolved	130.	10	134	40	Q	-	-		75-125	-		20
Chromium, Dissolved	0.00026J	0.2	0.1884	94		-	-		75-125	-		20
Cobalt, Dissolved	0.00274	0.5	0.4805	96		-	-		75-125	-		20
Copper, Dissolved	0.00078J	0.25	0.2300	92		-	-		75-125	-		20
Iron, Dissolved	5.45	1	6.40	95		-	-		75-125	-		20
Lead, Dissolved	0.00124	0.51	0.5530	108		-	-		75-125	-		20
Magnesium, Dissolved	36.9	10	46.1	92		-	-		75-125	-		20
Manganese, Dissolved	1.982	0.5	2.439	91		-	-		75-125	-		20
Nickel, Dissolved	0.00184J	0.5	0.4839	97		-	-		75-125	-		20
Potassium, Dissolved	12.2	10	21.8	96		-	-		75-125	-		20
Selenium, Dissolved	ND	0.12	0.129	108		-	-		75-125	-		20
Silver, Dissolved	0.00030J	0.05	0.05037	101		-	-		75-125	-		20
Sodium, Dissolved	73.5	10	79.9	64	Q	-	-		75-125	-		20
Thallium, Dissolved	ND	0.12	0.1243	104		-	-		75-125	-		20
Vanadium, Dissolved	ND	0.5	0.4823	96		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197826-3 QC Sample: L1901689-01 Client ID: RMW18_011419									
Zinc, Dissolved	0.00439J	0.5	0.5212	104	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197906-3 QC Sample: L1901689-01 Client ID: RMW18_011419									
Aluminum, Total	21.7	2	23.5	90	-	-	75-125	-	20
Antimony, Total	0.00104J	0.5	0.4475	90	-	-	75-125	-	20
Arsenic, Total	0.00684	0.12	0.1330	105	-	-	75-125	-	20
Barium, Total	0.3261	2	2.496	108	-	-	75-125	-	20
Beryllium, Total	0.00126	0.05	0.05060	99	-	-	75-125	-	20
Cadmium, Total	0.00029	0.051	0.06166	120	-	-	75-125	-	20
Calcium, Total	137.	10	140	30	Q	-	75-125	-	20
Chromium, Total	0.03672	0.2	0.2317	97	-	-	75-125	-	20
Cobalt, Total	0.01846	0.5	0.5180	100	-	-	75-125	-	20
Copper, Total	0.04824	0.25	0.2866	95	-	-	75-125	-	20
Iron, Total	36.4	1	34.4	0	Q	-	75-125	-	20
Lead, Total	0.2268	0.51	0.8128	115	-	-	75-125	-	20
Magnesium, Total	43.2	10	54.0	108	-	-	75-125	-	20
Manganese, Total	2.553	0.5	2.978	85	-	-	75-125	-	20
Nickel, Total	0.03340	0.5	0.5149	96	-	-	75-125	-	20
Potassium, Total	15.0	10	24.1	91	-	-	75-125	-	20
Selenium, Total	0.00469J	0.12	0.119	99	-	-	75-125	-	20
Silver, Total	0.00039J	0.05	0.05555	111	-	-	75-125	-	20
Sodium, Total	67.6	10	77.1	95	-	-	75-125	-	20
Thallium, Total	0.00035J	0.12	0.1332	111	-	-	75-125	-	20
Vanadium, Total	0.04135	0.5	0.5438	100	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197906-3 QC Sample: L1901689-01 Client ID: RMW18_011419									
Zinc, Total	0.1396	0.5	0.6858	109	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1198190-3 QC Sample: L1901495-01 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00432	86	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1198242-3 QC Sample: L1901689-01 Client ID: RMW18_011419									
Mercury, Dissolved	ND	0.005	0.00538	108	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197826-4 QC Sample: L1901689-01 Client ID: RMW18_011419						
Aluminum, Dissolved	0.00359J	0.00431J	mg/l	NC		20
Antimony, Dissolved	0.00130J	0.00289J	mg/l	NC		20
Arsenic, Dissolved	0.00231	0.00230	mg/l	1		20
Barium, Dissolved	0.1119	0.1068	mg/l	5		20
Beryllium, Dissolved	ND	ND	mg/l	NC		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Calcium, Dissolved	130.	127	mg/l	2		20
Chromium, Dissolved	0.00026J	0.00033J	mg/l	NC		20
Cobalt, Dissolved	0.00274	0.00261	mg/l	5		20
Copper, Dissolved	0.00078J	0.00081J	mg/l	NC		20
Iron, Dissolved	5.45	5.33	mg/l	2		20
Lead, Dissolved	0.00124	0.00122	mg/l	2		20
Magnesium, Dissolved	36.9	35.9	mg/l	3		20
Manganese, Dissolved	1.982	1.943	mg/l	2		20
Nickel, Dissolved	0.00184J	0.00172J	mg/l	NC		20
Potassium, Dissolved	12.2	11.7	mg/l	4		20
Selenium, Dissolved	ND	ND	mg/l	NC		20
Silver, Dissolved	0.00030J	0.00030J	mg/l	NC		20
Sodium, Dissolved	73.5	71.5	mg/l	3		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197826-4 QC Sample: L1901689-01 Client ID: RMW18_011419					
Thallium, Dissolved	ND	0.00030J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.00439J	0.00397J	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197906-4 QC Sample: L1901689-01 Client ID: RMW18_011419					
Aluminum, Total	21.7	18.9	mg/l	14	20
Antimony, Total	0.00104J	0.00291J	mg/l	NC	20
Arsenic, Total	0.00684	0.00647	mg/l	6	20
Barium, Total	0.3261	0.3094	mg/l	5	20
Beryllium, Total	0.00126	0.00141	mg/l	12	20
Cadmium, Total	0.00029	0.00024	mg/l	20	20
Calcium, Total	137.	136	mg/l	1	20
Chromium, Total	0.03672	0.03368	mg/l	9	20
Cobalt, Total	0.01846	0.01661	mg/l	11	20
Copper, Total	0.04824	0.04481	mg/l	7	20
Iron, Total	36.4	33.4	mg/l	9	20
Lead, Total	0.2268	0.2270	mg/l	0	20
Magnesium, Total	43.2	43.1	mg/l	0	20
Manganese, Total	2.553	2.516	mg/l	1	20
Nickel, Total	0.03340	0.03023	mg/l	10	20
Potassium, Total	15.0	13.9	mg/l	8	20
Selenium, Total	0.00469J	0.00446J	mg/l	NC	20
Silver, Total	0.00039J	0.00062	mg/l	NC	20
Sodium, Total	67.6	69.9	mg/l	3	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1197906-4 QC Sample: L1901689-01 Client ID: RMW18_011419					
Thallium, Total	0.00035J	0.00055	mg/l	NC	20
Vanadium, Total	0.04135	0.03708	mg/l	11	20
Zinc, Total	0.1396	0.1233	mg/l	12	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1198190-4 QC Sample: L1901495-01 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1198242-4 QC Sample: L1901689-01 Client ID: RMW18_011419					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-01
 Client ID: RMW18_011419
 Sample Location: BRONX, NY

Date Collected: 01/14/19 14:27
 Date Received: 01/14/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.003	J	mg/l	0.005	0.001	1	01/15/19 14:15	01/16/19 12:12	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/15/19 06:15	01/15/19 07:03	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19**SAMPLE RESULTS**

Lab ID: L1901689-02

Date Collected: 01/14/19 12:22

Client ID: RMW22_011419

Date Received: 01/14/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.003	J	mg/l	0.005	0.001	1	01/15/19 14:15	01/16/19 12:53	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/15/19 06:15	01/15/19 07:03	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901689

Project Number: 170487001

Report Date: 01/21/19

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1197667-1									
Chromium, Hexavalent	ND	mg/l	0.010	0.003	1	01/15/19 06:15	01/15/19 07:00	1,7196A	JT
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG1197810-1									
Cyanide, Total	ND	mg/l	0.005	0.001	1	01/15/19 14:15	01/16/19 11:40	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901689

Report Date: 01/21/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1197667-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1197810-2 WG1197810-3								
Cyanide, Total	96		93		85-115	3		20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1197667-4 QC Sample: L1901689-02 Client ID: RMW22_011419												
Chromium, Hexavalent	ND	0.1	0.095	95		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1197810-4 WG1197810-5 QC Sample: L1901689-01 Client ID: RMW18_011419												
Cyanide, Total	0.003J	0.2	0.189	94		0.191	96		80-120	1		20

Lab Duplicate Analysis*Batch Quality Control***Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1901689**Project Number:** 170487001**Report Date:** 01/21/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1197667-3 QC Sample: L1901689-02 Client ID: RMW22_011419						
Chromium, Hexavalent	ND	ND	mg/l	NC		20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01211917:18
Lab Number: L1901689
Report Date: 01/21/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901689-01A	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-01B	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-01C	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-01D	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901689-01E	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901689-01F	Plastic 250ml NaOH preserved	B	>12	>12	2.5	Y	Absent		TCN-9010(14)
L1901689-01G	Plastic 500ml unpreserved	B	7	7	2.5	Y	Absent		HEXCR-7196(1)
L1901689-01H	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-LVI(7)
L1901689-01I	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-LVI(7)
L1901689-01J	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1901689-01K	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1901689-01L	Amber 250ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901689-01M	Amber 250ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901689-01N	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		HERB-APA(7)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01211917:18
Lab Number: L1901689
Report Date: 01/21/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901689-01O	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		HERB-APA(7)
L1901689-02A	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-02B	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-02C	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-02D	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1901689-02E	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1901689-02F	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901689-02G	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901689-02H	Plastic 250ml NaOH preserved	B	>12	>12	2.5	Y	Absent		TCN-9010(14)
L1901689-02I	Plastic 500ml unpreserved	B	7	7	2.5	Y	Absent		HEXCR-7196(1)
L1901689-02J	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-LVI(7)
L1901689-02K	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-LVI(7)
L1901689-02L	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1901689-02M	Amber 120ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1901689-02N	Amber 250ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901689-02O	Amber 250ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901689-02P	Amber 500ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1901689-02Q	Amber 500ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1901689-02R	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		HERB-APA(7)
L1901689-02S	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		HERB-APA(7)

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Serial_No:01211917:18

Lab Number: L1901689

Report Date: 01/21/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901689-03A	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1901689-03B	Plastic 250ml unpreserved	A	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1901689-03C	Amber 500ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1901689-03D	Amber 500ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1901689-04A	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)
L1901689-04B	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901689
Report Date: 01/21/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd In Lab	ALPHA Job #																																																																																
		1 of 1	1/14/19	4901689																																																																																
Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: Gerard Ave. + E. 146th St. Project Location: Bronx NY Project # 170487001		Deliverables <input checked="" type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQulS (1 File) <input checked="" type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #																																																																														
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre-approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																														
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.		ANALYSIS <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <th>Part 375/TCL VOCs</th> <th>Part 375/TCL SVOCs</th> <th>Part 375/TCL PCBs</th> <th>Pesticides / herbicides</th> <th>Herbicides PFOS + 1,4-Dioxane</th> <th>TAL Metals</th> <th>Hexavalent Chromium</th> <th>Total Cyanide</th> <th>Sample Filtration</th> <th rowspan="2" style="writing-mode: vertical-rl; text-orientation: mixed;">Total Bottles</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below) </td> </tr> </table>						Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides / herbicides	Herbicides PFOS + 1,4-Dioxane	TAL Metals	Hexavalent Chromium	Total Cyanide	Sample Filtration	Total Bottles									<input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)																																																										
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ANALYTICAL REPORT

Lab Number:	L1901865
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/22/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1901865-01	RMW03_011519	WATER	BRONX, NY	01/15/19 15:30	01/15/19
L1901865-02	RMW04_011519	WATER	BRONX, NY	01/15/19 13:00	01/15/19
L1901865-03	RMW05_011519	WATER	BRONX, NY	01/15/19 11:00	01/15/19
L1901865-04	GWDUP01_011519	WATER	BRONX, NY	01/15/19 00:00	01/15/19
L1901865-05	GWTB02_011519	WATER	BRONX, NY	01/15/19 00:00	01/15/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Pesticides

L1901865-01, -03 and -04: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1901865-03: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

The WG1198177-3/-4 MS/MSD recoveries for calcium (250%/310%), iron (151%/161%), magnesium (152%/168%) and sodium (290%/310%), performed on L1901865-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

Dissolved Metals

The WG1198261-3/-4 MS/MSD recoveries for calcium (320%/510%), iron (141%/185%), magnesium (161%/182%) and sodium (310%/370%), performed on L1901865-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1198261-4 MSD recovery, performed on L1901865-02, is outside the acceptance criteria for potassium (137%). A post digestion spike was performed and was within acceptance criteria.

The WG1198576-4 MSD recovery, performed on L1901865-02, is outside the acceptance criteria for mercury (56%). A post digestion spike was performed and was within acceptance criteria.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Case Narrative (continued)

The WG1198576-3/-4 MS/MSD RPD for mercury (39%), performed on L1901865-02, is above the acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Amita Naik

Title: Technical Director/Representative

Date: 01/22/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 15:16
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	92		ug/l	0.50	0.16	1
Toluene	2.0	J	ug/l	2.5	0.70	1
Ethylbenzene	2.2	J	ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	11		ug/l	2.5	0.70	1
o-Xylene	2.0	J	ug/l	2.5	0.70	1
Xylenes, Total	13	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	1.2	J	ug/l	2.5	0.70	1
sec-Butylbenzene	3.5		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	20		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	30		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	13		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	0.73	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	8.4		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	2.4		ug/l	2.0	0.70	1
p-Ethyltoluene	2.3		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	20		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 15:44
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.49	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	2.8		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	98		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 16:12
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
Client ID: RMW05_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 16:40
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	89		ug/l	0.50	0.16	1
Toluene	2.0	J	ug/l	2.5	0.70	1
Ethylbenzene	2.2	J	ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	11		ug/l	2.5	0.70	1
o-Xylene	2.0	J	ug/l	2.5	0.70	1
Xylenes, Total	13	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	1.3	J	ug/l	2.5	0.70	1
sec-Butylbenzene	3.5		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	21		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	28		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	13		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	0.77	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	8.6		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	2.5		ug/l	2.0	0.70	1
p-Ethyltoluene	2.3		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	20		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-05
 Client ID: GWTB02_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 17:07
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-05
 Client ID: GWTB02_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-05
 Client ID: GWTB02_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/17/19 09:13
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1198696-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1198696-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1198696-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1198696-3 WG1198696-4								
Methylene chloride	92		91		70-130	1		20
1,1-Dichloroethane	96		98		70-130	2		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	90		93		63-132	3		20
1,2-Dichloropropane	96		100		70-130	4		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	95		98		70-130	3		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	72		75		62-150	4		20
1,2-Dichloroethane	95		100		70-130	5		20
1,1,1-Trichloroethane	94		95		67-130	1		20
Bromodichloromethane	96		98		67-130	2		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	93		97		70-130	4		20
1,1-Dichloropropene	89		92		70-130	3		20
Bromoform	99		100		54-136	1		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	91		94		70-130	3		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	54	Q	55	Q	64-130	2		20
Bromomethane	43		29	Q	39-139	39	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1198696-3 WG1198696-4								
Vinyl chloride	75		75		55-140	0		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	78		80		61-145	3		20
trans-1,2-Dichloroethene	90		94		70-130	4		20
Trichloroethene	93		96		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	93		100		63-130	7		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	95		97		70-130	2		20
Dibromomethane	94		98		70-130	4		20
1,2,3-Trichloropropane	100		110		64-130	10		20
Acrylonitrile	92		100		70-130	8		20
Styrene	90		95		70-130	5		20
Dichlorodifluoromethane	56		57		36-147	2		20
Acetone	83		75		58-148	10		20
Carbon disulfide	81		82		51-130	1		20
2-Butanone	93		98		63-138	5		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	88		110		59-130	22	Q	20
2-Hexanone	80		96		57-130	18		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1198696-3 WG1198696-4								
Bromochloromethane	99		100		70-130	1		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	96		100		70-130	4		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	98		100		53-136	2		20
sec-Butylbenzene	99		100		70-130	1		20
tert-Butylbenzene	97		98		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	88		100		41-144	13		20
Hexachlorobutadiene	80		80		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	96		97		70-130	1		20
Naphthalene	84		93		70-130	10		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	86		91		70-130	6		20
1,2,4-Trichlorobenzene	88		89		70-130	1		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	100		100		56-162	0		20
p-Diethylbenzene	93		95		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1198696-3 WG1198696-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	88		89		70-130	1		20
Ethyl ether	86		91		59-134	6		20
trans-1,4-Dichloro-2-butene	96		100		70-130	4		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	99		97		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198696-6 WG1198696-7 QC Sample: L1901865-02 Client ID: RMW04_011519												
Methylene chloride	ND	10	9.1	91		9.1	91		70-130	0		20
1,1-Dichloroethane	ND	10	9.9	99		10	100		70-130	1		20
Chloroform	ND	10	10	100		10	100		70-130	0		20
Carbon tetrachloride	ND	10	10	100		10	100		63-132	0		20
1,2-Dichloropropane	ND	10	9.9	99		10	100		70-130	1		20
Dibromochloromethane	ND	10	10	100		10	100		63-130	0		20
1,1,2-Trichloroethane	ND	10	10	100		11	110		70-130	10		20
Tetrachloroethene	ND	10	10	100		10	100		70-130	0		20
Chlorobenzene	ND	10	10	100		10	100		75-130	0		20
Trichlorofluoromethane	ND	10	8.1	81		7.9	79		62-150	2		20
1,2-Dichloroethane	ND	10	9.8	98		9.9	99		70-130	1		20
1,1,1-Trichloroethane	ND	10	10	100		10	100		67-130	0		20
Bromodichloromethane	ND	10	9.7	97		9.8	98		67-130	1		20
trans-1,3-Dichloropropene	ND	10	9.4	94		9.6	96		70-130	2		20
cis-1,3-Dichloropropene	ND	10	9.0	90		8.9	89		70-130	1		20
1,1-Dichloropropene	ND	10	9.9	99		9.8	98		70-130	1		20
Bromoform	ND	10	9.4	94		9.6	96		54-136	2		20
1,1,2,2-Tetrachloroethane	ND	10	10	100		11	110		67-130	10		20
Benzene	0.49J	10	10	100		9.9	99		70-130	1		20
Toluene	ND	10	11	110		11	110		70-130	0		20
Ethylbenzene	ND	10	11	110		11	110		70-130	0		20
Chloromethane	ND	10	5.1	51	Q	4.8	48	Q	64-130	6		20
Bromomethane	ND	10	1.2J	12	Q	1.2J	12	Q	39-139	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198696-6 WG1198696-7 QC Sample: L1901865-02 Client ID: RMW04_011519												
Vinyl chloride	ND	10	8.2	82		7.6	76		55-140	8		20
Chloroethane	ND	10	10	100		9.7	97		55-138	3		20
1,1-Dichloroethene	ND	10	8.6	86		8.5	85		61-145	1		20
trans-1,2-Dichloroethene	ND	10	9.3	93		9.3	93		70-130	0		20
Trichloroethene	ND	10	10	100		9.7	97		70-130	3		20
1,2-Dichlorobenzene	ND	10	9.9	99		10	100		70-130	1		20
1,3-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
1,4-Dichlorobenzene	ND	10	10	100		10	100		70-130	0		20
Methyl tert butyl ether	ND	10	9.5	95		9.8	98		63-130	3		20
p/m-Xylene	ND	20	22	110		22	110		70-130	0		20
o-Xylene	ND	20	21	105		22	110		70-130	5		20
cis-1,2-Dichloroethene	ND	10	9.9	99		9.7	97		70-130	2		20
Dibromomethane	ND	10	9.6	96		9.4	94		70-130	2		20
1,2,3-Trichloropropane	ND	10	11	110		11	110		64-130	0		20
Acrylonitrile	ND	10	10	100		10	100		70-130	0		20
Styrene	ND	20	19	95		19	95		70-130	0		20
Dichlorodifluoromethane	ND	10	5.7	57		5.6	56		36-147	2		20
Acetone	ND	10	9.0	90		9.9	99		58-148	10		20
Carbon disulfide	ND	10	8.4	84		8.2	82		51-130	2		20
2-Butanone	ND	10	9.0	90		9.3	93		63-138	3		20
Vinyl acetate	ND	10	11	110		10	100		70-130	10		20
4-Methyl-2-pentanone	ND	10	9.4	94		10	100		59-130	6		20
2-Hexanone	ND	10	8.4	84		9.4	94		57-130	11		20

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198696-6 WG1198696-7 QC Sample: L1901865-02 Client ID: RMW04_011519												
Bromochloromethane	ND	10	9.6	96		10	100		70-130	4		20
2,2-Dichloropropane	ND	10	8.1	81		7.9	79		63-133	2		20
1,2-Dibromoethane	ND	10	9.9	99		10	100		70-130	1		20
1,3-Dichloropropane	ND	10	10	100		11	110		70-130	10		20
1,1,1,2-Tetrachloroethane	ND	10	10	100		11	110		64-130	10		20
Bromobenzene	ND	10	9.8	98		10	100		70-130	2		20
n-Butylbenzene	ND	10	10	100		10	100		53-136	0		20
sec-Butylbenzene	ND	10	11	110		11	110		70-130	0		20
tert-Butylbenzene	ND	10	10	100		10	100		70-130	0		20
o-Chlorotoluene	ND	10	8.6	86		8.7	87		70-130	1		20
p-Chlorotoluene	ND	10	10	100		10	100		70-130	0		20
1,2-Dibromo-3-chloropropane	ND	10	9.2	92		9.5	95		41-144	3		20
Hexachlorobutadiene	ND	10	8.8	88		8.1	81		63-130	8		20
Isopropylbenzene	ND	10	11	110		11	110		70-130	0		20
p-Isopropyltoluene	ND	10	10	100		10	100		70-130	0		20
Naphthalene	2.8	10	12	92		13	102		70-130	8		20
n-Propylbenzene	ND	10	11	110		11	110		69-130	0		20
1,2,3-Trichlorobenzene	ND	10	8.8	88		9.2	92		70-130	4		20
1,2,4-Trichlorobenzene	ND	10	9.0	90		8.9	89		70-130	1		20
1,3,5-Trimethylbenzene	ND	10	10	100		10	100		64-130	0		20
1,2,4-Trimethylbenzene	ND	10	11	110		11	110		70-130	0		20
1,4-Dioxane	ND	500	500	100		590	118		56-162	17		20
p-Diethylbenzene	ND	10	10	100		9.8	98		70-130	2		20

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198696-6 WG1198696-7 QC Sample: L1901865-02 Client ID: RMW04_011519												
p-Ethyltoluene	ND	10	11	110		11	110		70-130	0		20
1,2,4,5-Tetramethylbenzene	ND	10	9.5	95		9.5	95		70-130	0		20
Ethyl ether	ND	10	8.8	88		8.8	88		59-134	0		20
trans-1,4-Dichloro-2-butene	ND	10	6.6	66	Q	5.8	58	Q	70-130	13		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	99		98		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	99		96		70-130
Toluene-d8	103		102		70-130



SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 16:48
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.0	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	0.85	J	ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	107		10-120
4-Terphenyl-d14	79		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 13:29
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	33		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	2.8		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	18		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.22		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.20		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.16		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Chrysene	0.19		ug/l	0.10	0.01	1
Acenaphthylene	1.4		ug/l	0.10	0.01	1
Anthracene	0.61		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.14		ug/l	0.10	0.01	1
Fluorene	0.90		ug/l	0.10	0.01	1
Phenanthrene	0.53		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.08	J	ug/l	0.10	0.01	1
Pyrene	2.7		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.31	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-01

Date Collected: 01/15/19 15:30

Client ID: RMW03_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	77		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 17:16
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.1	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	76		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 17:05
 Analyst: JJW

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	3.3		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.57		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	3.3		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.18		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.18		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.21		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.07	J	ug/l	0.10	0.01	1
Chrysene	0.15		ug/l	0.10	0.01	1
Acenaphthylene	0.23		ug/l	0.10	0.01	1
Anthracene	0.21		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.15		ug/l	0.10	0.01	1
Fluorene	0.46		ug/l	0.10	0.01	1
Phenanthrene	0.84		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.04	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.11		ug/l	0.10	0.01	1
Pyrene	0.87		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.30		ug/l	0.10	0.02	1
Pentachlorophenol	9.2		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	78		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 17:43
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		21-120
Phenol-d6	59		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	77		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 13:53
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	4.8		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.85		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.40		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.25		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.26		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.28		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.09	J	ug/l	0.10	0.01	1
Chrysene	0.20		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.27		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.17		ug/l	0.10	0.01	1
Fluorene	0.39		ug/l	0.10	0.01	1
Phenanthrene	0.94		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.04	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.15		ug/l	0.10	0.01	1
Pyrene	0.96		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.15		ug/l	0.10	0.02	1
Pentachlorophenol	0.22	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-03

Date Collected: 01/15/19 11:00

Client ID: RMW05_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	75		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/18/19 18:10
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		21-120
Phenol-d6	57		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	103		10-120
4-Terphenyl-d14	85		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 17:29
 Analyst: JJW

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	32		ug/l	0.10	0.01	1
2-Chloronaphthalene	0.04	J	ug/l	0.20	0.02	1
Fluoranthene	2.5		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	19		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.14		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.09	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.08	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.12		ug/l	0.10	0.01	1
Acenaphthylene	1.3		ug/l	0.10	0.01	1
Anthracene	0.59		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.07	J	ug/l	0.10	0.01	1
Fluorene	0.83		ug/l	0.10	0.01	1
Phenanthrene	0.50		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.05	J	ug/l	0.10	0.01	1
Pyrene	2.3		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.26		ug/l	0.10	0.02	1
Pentachlorophenol	0.21	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	75		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/18/19 12:47
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198362-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/18/19 12:47
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198362-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/18/19 12:47
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 00:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198362-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	41		10-120
4-Terphenyl-d14	82		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/18/19 14:44
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1198363-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	0.18	J	ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 14:44
 Analyst: JJW

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 00:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1198363-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	56		10-120
4-Terphenyl-d14	86		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198362-2 WG1198362-3								
Acenaphthene	83		77		37-111	8		30
1,2,4-Trichlorobenzene	78		75		39-98	4		30
Hexachlorobenzene	84		76		40-140	10		30
Bis(2-chloroethyl)ether	78		77		40-140	1		30
2-Chloronaphthalene	81		78		40-140	4		30
1,2-Dichlorobenzene	74		72		40-140	3		30
1,3-Dichlorobenzene	72		70		40-140	3		30
1,4-Dichlorobenzene	73		71		36-97	3		30
3,3'-Dichlorobenzidine	42		69		40-140	49	Q	30
2,4-Dinitrotoluene	84		74		48-143	13		30
2,6-Dinitrotoluene	85		77		40-140	10		30
Fluoranthene	90		79		40-140	13		30
4-Chlorophenyl phenyl ether	84		79		40-140	6		30
4-Bromophenyl phenyl ether	88		81		40-140	8		30
Bis(2-chloroisopropyl)ether	74		73		40-140	1		30
Bis(2-chloroethoxy)methane	86		79		40-140	8		30
Hexachlorobutadiene	78		77		40-140	1		30
Hexachlorocyclopentadiene	66		67		40-140	2		30
Hexachloroethane	72		72		40-140	0		30
Isophorone	90		84		40-140	7		30
Naphthalene	77		75		40-140	3		30
Nitrobenzene	79		76		40-140	4		30
NDPA/DPA	86		83		40-140	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198362-2 WG1198362-3								
n-Nitrosodi-n-propylamine	96		90		29-132	6		30
Bis(2-ethylhexyl)phthalate	91		90		40-140	1		30
Butyl benzyl phthalate	84		81		40-140	4		30
Di-n-butylphthalate	87		77		40-140	12		30
Di-n-octylphthalate	85		85		40-140	0		30
Diethyl phthalate	94		83		40-140	12		30
Dimethyl phthalate	92		83		40-140	10		30
Benzo(a)anthracene	94		87		40-140	8		30
Benzo(a)pyrene	89		81		40-140	9		30
Benzo(b)fluoranthene	91		82		40-140	10		30
Benzo(k)fluoranthene	97		84		40-140	14		30
Chrysene	89		79		40-140	12		30
Acenaphthylene	86		79		45-123	8		30
Anthracene	88		81		40-140	8		30
Benzo(ghi)perylene	91		84		40-140	8		30
Fluorene	88		80		40-140	10		30
Phenanthrene	84		74		40-140	13		30
Dibenzo(a,h)anthracene	91		82		40-140	10		30
Indeno(1,2,3-cd)pyrene	86		82		40-140	5		30
Pyrene	86		75		26-127	14		30
Biphenyl	88		81		40-140	8		30
4-Chloroaniline	43		65		40-140	41	Q	30
2-Nitroaniline	83		76		52-143	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198362-2 WG1198362-3								
3-Nitroaniline	66		71		25-145	7		30
4-Nitroaniline	76		74		51-143	3		30
Dibenzofuran	82		77		40-140	6		30
2-Methylnaphthalene	84		77		40-140	9		30
1,2,4,5-Tetrachlorobenzene	81		77		2-134	5		30
Acetophenone	89		85		39-129	5		30
2,4,6-Trichlorophenol	79		76		30-130	4		30
p-Chloro-m-cresol	87		81		23-97	7		30
2-Chlorophenol	80		78		27-123	3		30
2,4-Dichlorophenol	81		78		30-130	4		30
2,4-Dimethylphenol	29	Q	78		30-130	92	Q	30
2-Nitrophenol	79		74		30-130	7		30
4-Nitrophenol	67		62		10-80	8		30
2,4-Dinitrophenol	70		68		20-130	3		30
4,6-Dinitro-o-cresol	77		70		20-164	10		30
Pentachlorophenol	80		77		9-103	4		30
Phenol	62		61		12-110	2		30
2-Methylphenol	69		78		30-130	12		30
3-Methylphenol/4-Methylphenol	79		77		30-130	3		30
2,4,5-Trichlorophenol	84		75		30-130	11		30
Benzoic Acid	65		66		10-164	2		30
Benzyl Alcohol	84		82		26-116	2		30
Carbazole	91		81		55-144	12		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198362-2 WG1198362-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	67		69		21-120
Phenol-d6	60		60		10-120
Nitrobenzene-d5	81		79		23-120
2-Fluorobiphenyl	82		78		15-120
2,4,6-Tribromophenol	75		75		10-120
4-Terphenyl-d14	85		72		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1198363-2 WG1198363-3								
Acenaphthene	73		78		40-140	7		40
2-Chloronaphthalene	70		74		40-140	6		40
Fluoranthene	84		89		40-140	6		40
Hexachlorobutadiene	70		74		40-140	6		40
Naphthalene	73		77		40-140	5		40
Benzo(a)anthracene	86		91		40-140	6		40
Benzo(a)pyrene	95		100		40-140	5		40
Benzo(b)fluoranthene	93		100		40-140	7		40
Benzo(k)fluoranthene	94		98		40-140	4		40
Chrysene	81		87		40-140	7		40
Acenaphthylene	79		84		40-140	6		40
Anthracene	86		91		40-140	6		40
Benzo(ghi)perylene	88		95		40-140	8		40
Fluorene	77		81		40-140	5		40
Phenanthrene	80		86		40-140	7		40
Dibenzo(a,h)anthracene	91		98		40-140	7		40
Indeno(1,2,3-cd)pyrene	92		99		40-140	7		40
Pyrene	82		88		40-140	7		40
2-Methylnaphthalene	72		77		40-140	7		40
Pentachlorophenol	72		77		40-140	7		40
Hexachlorobenzene	75		80		40-140	6		40
Hexachloroethane	74		76		40-140	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1198363-2 WG1198363-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	65		67		21-120
Phenol-d6	54		56		10-120
Nitrobenzene-d5	84		88		23-120
2-Fluorobiphenyl	71		76		15-120
2,4,6-Tribromophenol	80		79		10-120
4-Terphenyl-d14	74		80		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198362-4 WG1198362-5 QC Sample: L1901865-02 Client ID: RMW04_011519												
1,2,4-Trichlorobenzene	ND	18.2	15	83		14	77		39-98	7		30
Bis(2-chloroethyl)ether	ND	18.2	15	83		15	83		40-140	0		30
1,2-Dichlorobenzene	ND	18.2	14	77		14	77		40-140	0		30
1,3-Dichlorobenzene	ND	18.2	13	72		13	72		40-140	0		30
1,4-Dichlorobenzene	ND	18.2	14	77		14	77		36-97	0		30
3,3'-Dichlorobenzidine	ND	18.2	3.2J	18	Q	3.5J	19	Q	40-140	9		30
2,4-Dinitrotoluene	ND	18.2	16	88		15	83		48-143	6		30
2,6-Dinitrotoluene	ND	18.2	16	88		15	83		40-140	6		30
4-Chlorophenyl phenyl ether	ND	18.2	15	83		15	83		40-140	0		30
4-Bromophenyl phenyl ether	ND	18.2	17	94		15	83		40-140	13		30
Bis(2-chloroisopropyl)ether	ND	18.2	14	77		14	77		40-140	0		30
Bis(2-chloroethoxy)methane	ND	18.2	16	88		16	88		40-140	0		30
Hexachlorocyclopentadiene	ND	18.2	14.J	77		13.J	72		40-140	7		30
Isophorone	ND	18.2	17	94		17	94		40-140	0		30
Nitrobenzene	ND	18.2	15	83		15	83		40-140	0		30
NDPA/DPA	ND	18.2	16	88		15	83		40-140	6		30
n-Nitrosodi-n-propylamine	ND	18.2	18	99		17	94		29-132	6		30
Bis(2-ethylhexyl)phthalate	2.1J	18.2	18	99		18	99		40-140	0		30
Butyl benzyl phthalate	ND	18.2	19	100		18	99		40-140	5		30
Di-n-butylphthalate	ND	18.2	17	94		16	88		40-140	6		30
Di-n-octylphthalate	ND	18.2	19	100		18	99		40-140	5		30
Diethyl phthalate	ND	18.2	17	94		16	88		40-140	6		30
Dimethyl phthalate	ND	18.2	17	94		16	88		40-140	6		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198362-4 WG1198362-5 QC Sample: L1901865-02 Client ID: RMW04_011519												
Biphenyl	ND	18.2	16	88		16	88		40-140	0		30
4-Chloroaniline	ND	18.2	7.3	40		7.2	40		40-140	1		30
2-Nitroaniline	ND	18.2	16	88		16	88		52-143	0		30
3-Nitroaniline	ND	18.2	9.4	52		9.7	53		25-145	3		30
4-Nitroaniline	ND	18.2	14	77		13	72		51-143	7		30
Dibenzofuran	ND	18.2	15	83		15	83		40-140	0		30
1,2,4,5-Tetrachlorobenzene	ND	18.2	15	83		15	83		2-134	0		30
Acetophenone	ND	18.2	17	94		17	94		39-129	0		30
2,4,6-Trichlorophenol	ND	18.2	16	88		16	88		30-130	0		30
p-Chloro-m-cresol	ND	18.2	17	94		16	88		23-97	6		30
2-Chlorophenol	ND	18.2	15	83		15	83		27-123	0		30
2,4-Dichlorophenol	ND	18.2	16	88		15	83		30-130	6		30
2,4-Dimethylphenol	ND	18.2	7.4	41		6.2	34		30-130	18		30
2-Nitrophenol	ND	18.2	15	83		15	83		30-130	0		30
4-Nitrophenol	ND	18.2	14	77		14	77		10-80	0		30
2,4-Dinitrophenol	ND	18.2	16.J	88		16.J	88		20-130	0		30
4,6-Dinitro-o-cresol	ND	18.2	16	88		14	77		20-164	13		30
Phenol	ND	18.2	12	66		12	66		12-110	0		30
2-Methylphenol	ND	18.2	14	77		13	72		30-130	7		30
3-Methylphenol/4-Methylphenol	ND	18.2	15	83		15	83		30-130	0		30
2,4,5-Trichlorophenol	ND	18.2	16	88		16	88		30-130	0		30
Benzoic Acid	ND	18.2	18.J	99		18.J	99		10-164	0		30
Benzyl Alcohol	ND	18.2	17	94		17	94		26-116	0		30

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198362-4 WG1198362-5 QC Sample: L1901865-02 Client ID: RMW04_011519												
Carbazole	ND	18.2	17	94		16	88		55-144	6		30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	82		76		10-120
2-Fluorobiphenyl	87		82		15-120
2-Fluorophenol	73		73		21-120
4-Terphenyl-d14	86		79		41-149
Nitrobenzene-d5	85		82		23-120
Phenol-d6	66		65		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198363-4 WG1198363-5 QC Sample: L1901865-02 Client ID: RMW04_011519												
Acenaphthene	3.3	18.2	20	92		19	86		40-140	5		40
2-Chloronaphthalene	ND	18.2	16	88		15	83		40-140	6		40
Fluoranthene	0.57	18.2	19	100		18	96		40-140	5		40
Hexachlorobutadiene	ND	18.2	15	83		15	83		40-140	0		40
Naphthalene	3.3	18.2	20	92		19	86		40-140	5		40
Benzo(a)anthracene	0.18	18.2	19	100		18	98		40-140	5		40
Benzo(a)pyrene	0.18	18.2	20	110		19	100		40-140	5		40
Benzo(b)fluoranthene	0.21	18.2	19	100		18	98		40-140	5		40
Benzo(k)fluoranthene	0.07J	18.2	20	110		19	100		40-140	5		40
Chrysene	0.15	18.2	18	98		17	93		40-140	6		40
Acenaphthylene	0.23	18.2	18	98		17	92		40-140	6		40
Anthracene	0.21	18.2	19	100		18	98		40-140	5		40
Benzo(ghi)perylene	0.15	18.2	21	110		20	110		40-140	5		40
Fluorene	0.46	18.2	17	91		16	85		40-140	6		40
Phenanthrene	0.84	18.2	19	100		18	94		40-140	5		40
Dibenzo(a,h)anthracene	0.04J	18.2	21	120		20	110		40-140	5		40
Indeno(1,2,3-cd)pyrene	0.11	18.2	22	120		21	110		40-140	5		40
Pyrene	0.87	18.2	19	100		18	94		40-140	5		40
2-Methylnaphthalene	0.30	18.2	16	86		15	81		40-140	6		40
Pentachlorophenol	9.2	18.2	28	100		26	92		40-140	7		40
Hexachlorobenzene	ND	18.2	16	88		16	88		40-140	0		40
Hexachloroethane	ND	18.2	16	88		15	83		40-140	6		40

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatiles Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198363-4 WG1198363-5 QC Sample: L1901865-02
Client ID: RMW04_011519

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	91		84		10-120
2-Fluorobiphenyl	85		81		15-120
2-Fluorophenol	77		74		21-120
4-Terphenyl-d14	87		80		41-149
Nitrobenzene-d5	91		87		23-120
Phenol-d6	66		64		10-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
Client ID: RMW03_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/20/19 21:04
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		30-150	B
Decachlorobiphenyl	101		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
Client ID: RMW04_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/20/19 23:19
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
Client ID: RMW05_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/20/19 21:17
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
Client ID: GWDUP01_011519
Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
Date Received: 01/15/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/22/19 11:35
Analyst: AWS

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	107		30-150	B
Decachlorobiphenyl	118		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/21/19 00:41
 Analyst: WR

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 04:01
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/17/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198386-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	82		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198386-2 WG1198386-3									
Aroclor 1016	75		66		40-140	13		50	A
Aroclor 1260	79		71		40-140	11		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		76		30-150	A
Decachlorobiphenyl	100		83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		80		30-150	B
Decachlorobiphenyl	99		90		30-150	B



Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198386-4 WG1198386-5 QC Sample: L1901865-02 Client ID: RMW04_011519													
Aroclor 1016	ND	1.78	1.48	83		1.25	70		40-140	17		50	A
Aroclor 1260	ND	1.78	1.29	72		1.16	65		40-140	11		50	A

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	83		71		30-150	A
Decachlorobiphenyl	67		58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		76		30-150	B
Decachlorobiphenyl	73		63		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 12:41
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 02:10

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	B
2,4,5-T	ND		ug/l	2.00	0.531	1	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	91		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01 D
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/21/19 22:13
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 16:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.143	0.033	10	A
Lindane	ND		ug/l	0.143	0.031	10	A
Alpha-BHC	ND		ug/l	0.143	0.031	10	A
Beta-BHC	ND		ug/l	0.143	0.040	10	A
Heptachlor	ND		ug/l	0.143	0.022	10	A
Aldrin	ND		ug/l	0.143	0.015	10	A
Heptachlor epoxide	ND		ug/l	0.143	0.030	10	A
Endrin	ND		ug/l	0.286	0.031	10	A
Endrin aldehyde	ND		ug/l	0.286	0.058	10	A
Endrin ketone	ND		ug/l	0.286	0.034	10	A
Dieldrin	ND		ug/l	0.286	0.031	10	A
4,4'-DDE	ND		ug/l	0.286	0.027	10	A
4,4'-DDD	ND		ug/l	0.286	0.033	10	A
4,4'-DDT	ND		ug/l	0.286	0.031	10	A
Endosulfan I	ND		ug/l	0.143	0.025	10	A
Endosulfan II	ND		ug/l	0.286	0.037	10	A
Endosulfan sulfate	ND		ug/l	0.286	0.034	10	A
Methoxychlor	ND		ug/l	1.43	0.049	10	A
Toxaphene	ND		ug/l	1.43	0.448	10	A
cis-Chlordane	ND		ug/l	0.143	0.048	10	A
trans-Chlordane	ND		ug/l	0.143	0.045	10	A
Chlordane	ND		ug/l	1.43	0.331	10	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-01 D

Date Collected: 01/15/19 15:30

Client ID: RMW03_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	116		30-150	B
Decachlorobiphenyl	128		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/22/19 11:30
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/22/19 01:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	99		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 11:44
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 02:10

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	B
2,4,5-T	ND		ug/l	2.00	0.531	1	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	91		30-150	A
DCAA	83		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 13:00
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 02:10

Methylation Date: 01/18/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	B
2,4,5-T	ND		ug/l	2.00	0.531	1	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	77		30-150	A
DCAA	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03 D
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/21/19 22:25
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 16:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.714	0.167	50	A
Lindane	ND		ug/l	0.714	0.155	50	A
Alpha-BHC	ND		ug/l	0.714	0.157	50	A
Beta-BHC	ND		ug/l	0.714	0.200	50	A
Heptachlor	ND		ug/l	0.714	0.111	50	A
Aldrin	ND		ug/l	0.714	0.077	50	A
Heptachlor epoxide	ND		ug/l	0.714	0.148	50	A
Endrin	ND		ug/l	1.43	0.153	50	A
Endrin aldehyde	ND		ug/l	1.43	0.289	50	A
Endrin ketone	ND		ug/l	1.43	0.170	50	A
Dieldrin	ND		ug/l	1.43	0.153	50	A
4,4'-DDE	ND		ug/l	1.43	0.136	50	A
4,4'-DDD	ND		ug/l	1.43	0.166	50	A
4,4'-DDT	ND		ug/l	1.43	0.154	50	A
Endosulfan I	ND		ug/l	0.714	0.123	50	A
Endosulfan II	ND		ug/l	1.43	0.185	50	A
Endosulfan sulfate	ND		ug/l	1.43	0.172	50	A
Methoxychlor	ND		ug/l	7.14	0.244	50	A
Toxaphene	ND		ug/l	7.14	2.24	50	A
cis-Chlordane	ND		ug/l	0.714	0.238	50	A
trans-Chlordane	ND		ug/l	0.714	0.224	50	A
Chlordane	ND		ug/l	7.14	1.65	50	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-03 D

Date Collected: 01/15/19 11:00

Client ID: RMW05_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 20:46
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 02:10

Methylation Date: 01/19/19 07:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	B
2,4,5-T	ND		ug/l	2.00	0.531	1	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	108		30-150	A
DCAA	92		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04 D
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/21/19 22:38
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.071	0.017	5	A
Lindane	ND		ug/l	0.071	0.016	5	A
Alpha-BHC	ND		ug/l	0.071	0.016	5	A
Beta-BHC	ND		ug/l	0.071	0.020	5	A
Heptachlor	ND		ug/l	0.071	0.011	5	A
Aldrin	ND		ug/l	0.071	0.008	5	A
Heptachlor epoxide	ND		ug/l	0.071	0.015	5	A
Endrin	ND		ug/l	0.143	0.015	5	A
Endrin aldehyde	ND		ug/l	0.143	0.029	5	A
Endrin ketone	ND		ug/l	0.143	0.017	5	A
Dieldrin	ND		ug/l	0.143	0.015	5	A
4,4'-DDE	ND		ug/l	0.143	0.014	5	A
4,4'-DDD	ND		ug/l	0.143	0.017	5	A
4,4'-DDT	ND		ug/l	0.143	0.015	5	A
Endosulfan I	ND		ug/l	0.071	0.012	5	A
Endosulfan II	ND		ug/l	0.143	0.019	5	A
Endosulfan sulfate	ND		ug/l	0.143	0.017	5	A
Methoxychlor	ND		ug/l	0.714	0.024	5	A
Toxaphene	ND		ug/l	0.714	0.224	5	A
cis-Chlordane	ND		ug/l	0.071	0.024	5	A
trans-Chlordane	ND		ug/l	0.071	0.022	5	A
Chlordane	ND		ug/l	0.714	0.165	5	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-04 D
 Client ID: GWDUP01_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 00:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	30		30-150	A
Decachlorobiphenyl	31		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/17/19 22:13
Analyst: SL

Extraction Method: EPA 3510C
Extraction Date: 01/16/19 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,03-04 Batch: WG1198266-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 01/17/19 22:13
 Analyst: SL

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,03-04 Batch: WG1198266-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/19/19 14:10
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/17/19 08:10

Methylation Date: 01/17/19 17:55

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198737-1						
2,4-D	ND		ug/l	10.0	0.498	B
2,4,5-T	ND		ug/l	2.00	0.531	B
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	6	Q	30-150	A
DCAA	30		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/22/19 10:52
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1199589-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/22/19 10:52
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1199589-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	90		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-04 Batch: WG1198266-2 WG1198266-3									
Delta-BHC	92		85		30-150	9		20	A
Lindane	93		85		30-150	9		20	A
Alpha-BHC	99		89		30-150	11		20	A
Beta-BHC	88		79		30-150	11		20	A
Heptachlor	94		85		30-150	11		20	A
Aldrin	92		82		30-150	11		20	A
Heptachlor epoxide	98		89		30-150	10		20	A
Endrin	102		91		30-150	11		20	A
Endrin aldehyde	79		75		30-150	5		20	A
Endrin ketone	104		94		30-150	10		20	A
Dieldrin	108		99		30-150	8		20	A
4,4'-DDE	101		91		30-150	10		20	A
4,4'-DDD	99		89		30-150	12		20	A
4,4'-DDT	106		94		30-150	12		20	A
Endosulfan I	93		85		30-150	9		20	A
Endosulfan II	94		86		30-150	9		20	A
Endosulfan sulfate	92		83		30-150	9		20	A
Methoxychlor	120		106		30-150	12		20	A
cis-Chlordane	52		80		30-150	42	Q	20	A
trans-Chlordane	95		85		30-150	11		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-04 Batch: WG1198266-2 WG1198266-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	78		69		30-150	A
Decachlorobiphenyl	101		82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		73		30-150	B
Decachlorobiphenyl	104		87		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198737-2 WG1198737-3									
2,4-D	42		44		30-150	5		25	B
2,4,5-T	58		55		30-150	5		25	B
2,4,5-TP (Silvex)	53		48		30-150	10		25	B

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	12	Q	20	Q	30-150	A
DCAA	34		41		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1199589-2 WG1199589-3									
Delta-BHC	83		87		30-150	5		20	A
Lindane	81		85		30-150	4		20	A
Alpha-BHC	85		90		30-150	5		20	A
Beta-BHC	91		97		30-150	6		20	A
Heptachlor	79		87		30-150	10		20	A
Aldrin	75		85		30-150	12		20	A
Heptachlor epoxide	91		95		30-150	5		20	A
Endrin	87		91		30-150	5		20	A
Endrin aldehyde	77		78		30-150	0		20	A
Endrin ketone	91		95		30-150	4		20	A
Dieldrin	91		96		30-150	5		20	A
4,4'-DDE	83		90		30-150	8		20	A
4,4'-DDD	85		91		30-150	7		20	A
4,4'-DDT	88		89		30-150	2		20	A
Endosulfan I	84		85		30-150	1		20	A
Endosulfan II	83		88		30-150	6		20	A
Endosulfan sulfate	86		89		30-150	3		20	A
Methoxychlor	96		99		30-150	4		20	A
cis-Chlordane	76		81		30-150	7		20	A
trans-Chlordane	75		82		30-150	9		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1199589-2 WG1199589-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	78		84		30-150	A
Decachlorobiphenyl	74		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		90		30-150	B
Decachlorobiphenyl	79		89		30-150	B

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198737-4 WG1198737-5 QC Sample: L1901865-02 Client ID: RMW04_011519													
2,4-D	ND	5	4.19J	84		4.07J	81		30-150	3		25	B
2,4,5-T	ND	5	4.50	90		4.56	91		30-150	1		25	B
2,4,5-TP (Silvex)	ND	5	4.14	83		4.24	85		30-150	2		25	B

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
DCAA	91		97		30-150	A
DCAA	236	Q	227	Q	30-150	B



Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1199589-6 WG1199589-7 QC Sample: L1901865-02 Client ID: RMW04_011519													
Delta-BHC	ND	0.357	0.349	98		0.362	101		30-150	4		30	A
Lindane	ND	0.357	0.320	90		0.338	95		30-150	5		30	A
Alpha-BHC	ND	0.357	0.363	102		0.368	103		30-150	1		30	A
Beta-BHC	ND	0.357	0.328	92		0.349	98		30-150	6		30	A
Heptachlor	ND	0.357	0.328	92		0.336	94		30-150	2		30	A
Aldrin	ND	0.357	0.330	92		0.339	95		30-150	3		30	A
Heptachlor epoxide	ND	0.357	0.370	104		0.378	106		30-150	2		30	A
Endrin	ND	0.357	0.376	105		0.383	107		30-150	2		30	A
Endrin aldehyde	ND	0.357	0.335	94		0.344	96		30-150	3		30	A
Endrin ketone	ND	0.357	0.388	109		0.399	112		30-150	3		30	A
Dieldrin	ND	0.357	0.384	108		0.391	109		30-150	2		30	A
4,4'-DDE	ND	0.357	0.352	99		0.358	100		30-150	2		30	A
4,4'-DDD	ND	0.357	0.363	102		0.371	104		30-150	2		30	A
4,4'-DDT	ND	0.357	0.355	99		0.358	100		30-150	1		30	A
Endosulfan I	ND	0.357	0.343	96		0.353	99		30-150	3		30	A
Endosulfan II	ND	0.357	0.359	101		0.365	102		30-150	2		30	A
Endosulfan sulfate	ND	0.357	0.380	106		0.380	106		30-150	0		30	A
Methoxychlor	ND	0.357	0.408	114		0.425	119		30-150	4		30	A
cis-Chlordane	ND	0.357	0.330	92		0.332	93		30-150	1		30	A
trans-Chlordane	ND	0.357	0.329	92		0.337	94		30-150	2		30	A

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1199589-6 WG1199589-7 QC Sample: L1901865-02 Client ID: RMW04_011519

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	98		98		30-150	A
Decachlorobiphenyl	61		55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		97		30-150	B
Decachlorobiphenyl	76		69		30-150	B

METALS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.225		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Antimony, Total	0.00067	J	mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00155		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Barium, Total	0.4160		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Calcium, Total	427.		mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Chromium, Total	0.00294		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00040	J	mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Copper, Total	0.00258		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Iron, Total	0.984		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Lead, Total	0.00777		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Magnesium, Total	59.1		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Manganese, Total	0.9509		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 22:02	EPA 7470A	1,7470A	MG
Nickel, Total	0.00383		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Potassium, Total	25.2		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Sodium, Total	377.		mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
Zinc, Total	0.00560	J	mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 13:16	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/17/19 13:16	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00443	J	mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00179	J	mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00091		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.4057		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Calcium, Dissolved	423.		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00069	J	mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00018	J	mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.439		mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	57.6		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.9551		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Mercury, Dissolved	0.00006	J	mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:52	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00183	J	mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Potassium, Dissolved	25.3		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Sodium, Dissolved	370.		mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00025	J	mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 11:49	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.14		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Antimony, Total	0.00364	J	mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00221		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Barium, Total	0.4032		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Calcium, Total	354.		mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Chromium, Total	0.00644		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00178		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Copper, Total	0.00712		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Iron, Total	8.99		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Lead, Total	0.03752		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Magnesium, Total	52.7		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Manganese, Total	1.036		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Mercury, Total	0.00009	J	mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 21:52	EPA 7470A	1,7470A	MG
Nickel, Total	0.00566		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Potassium, Total	23.1		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Sodium, Total	189.		mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Thallium, Total	0.00024	J	mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00416	J	mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
Zinc, Total	0.01978		mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 12:35	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/17/19 12:35	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-02
 Client ID: RMW04_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 13:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00522	J	mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00208	J	mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00149		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.3518		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Calcium, Dissolved	327.		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00033	J	mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00059		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Iron, Dissolved	5.87		mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	49.6		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.9776		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:41	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00233		mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Potassium, Dissolved	21.5		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Sodium, Dissolved	181.		mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00020	J	mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 11:30	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.58		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Antimony, Total	0.00131	J	mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00144		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Barium, Total	0.2146		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00010	J	mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00007	J	mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Calcium, Total	151.		mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Chromium, Total	0.01169		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00176		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Copper, Total	0.01153		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Iron, Total	3.20		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Lead, Total	0.05522		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Magnesium, Total	80.6		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Manganese, Total	0.3425		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Mercury, Total	0.00020		mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 22:04	EPA 7470A	1,7470A	MG
Nickel, Total	0.00759		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Potassium, Total	29.6		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Sodium, Total	43.8		mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00515		mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
Zinc, Total	0.03200		mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 12:39	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	0.011		mg/l	0.010	0.010	1		01/17/19 12:39	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

SAMPLE RESULTS

Lab ID: L1901865-03
 Client ID: RMW05_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 11:00
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00551	J	mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00072	J	mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00036	J	mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1601		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Calcium, Dissolved	147.		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00115		mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00020	J	mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.313		mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	80.8		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.2947		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:53	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00059	J	mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Potassium, Dissolved	29.2		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Sodium, Dissolved	44.1		mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 11:53	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-04

Date Collected: 01/15/19 00:00

Client ID: GWDUP01_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.221		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00143		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Barium, Total	0.4095		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Calcium, Total	417.		mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Chromium, Total	0.00284		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00041	J	mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Copper, Total	0.00247		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Iron, Total	0.919		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Lead, Total	0.00767		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Magnesium, Total	57.1		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Manganese, Total	0.9354		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 22:06	EPA 7470A	1,7470A	MG
Nickel, Total	0.00365		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Potassium, Total	24.8		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Sodium, Total	369.		mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
Zinc, Total	0.00549	J	mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 12:02	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/17/19 12:02	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-04

Date Collected: 01/15/19 00:00

Client ID: GWDUP01_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00543	J	mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00048	J	mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00064		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.4194		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Calcium, Dissolved	421.		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00066	J	mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00017	J	mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.418		mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	58.0		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.9654		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:55	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00148	J	mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Potassium, Dissolved	25.4		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Sodium, Dissolved	371.		mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 11:58	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198177-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Antimony, Total	0.00045	J	mg/l	0.00400	0.00042	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Calcium, Total	0.0394	J	mg/l	0.100	0.0394	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Sodium, Total	0.0432	J	mg/l	0.100	0.0293	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/16/19 12:03	01/17/19 12:21	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198197-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/16/19 12:45	01/16/19 21:49	1,7470A	MG



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198261-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Chromium, Dissolved	0.00022	J	mg/l	0.00100	0.00017	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Iron, Dissolved	0.0328	J	mg/l	0.0500	0.0191	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Sodium, Dissolved	0.0384	J	mg/l	0.100	0.0293	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/16/19 16:10	01/17/19 10:34	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198576-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:38	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198177-2								
Aluminum, Total	102		-		80-120	-		
Antimony, Total	96		-		80-120	-		
Arsenic, Total	104		-		80-120	-		
Barium, Total	104		-		80-120	-		
Beryllium, Total	104		-		80-120	-		
Cadmium, Total	110		-		80-120	-		
Calcium, Total	100		-		80-120	-		
Chromium, Total	100		-		80-120	-		
Cobalt, Total	101		-		80-120	-		
Copper, Total	96		-		80-120	-		
Iron, Total	111		-		80-120	-		
Lead, Total	107		-		80-120	-		
Magnesium, Total	105		-		80-120	-		
Manganese, Total	99		-		80-120	-		
Nickel, Total	100		-		80-120	-		
Potassium, Total	102		-		80-120	-		
Selenium, Total	106		-		80-120	-		
Silver, Total	102		-		80-120	-		
Sodium, Total	100		-		80-120	-		
Thallium, Total	105		-		80-120	-		
Vanadium, Total	102		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198177-2					
Zinc, Total	108	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198197-2					
Mercury, Total	112	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198261-2					
Aluminum, Dissolved	102	-	80-120	-	
Antimony, Dissolved	91	-	80-120	-	
Arsenic, Dissolved	109	-	80-120	-	
Barium, Dissolved	104	-	80-120	-	
Beryllium, Dissolved	109	-	80-120	-	
Cadmium, Dissolved	113	-	80-120	-	
Calcium, Dissolved	106	-	80-120	-	
Chromium, Dissolved	105	-	80-120	-	
Cobalt, Dissolved	106	-	80-120	-	
Copper, Dissolved	103	-	80-120	-	
Iron, Dissolved	108	-	80-120	-	
Lead, Dissolved	110	-	80-120	-	
Magnesium, Dissolved	107	-	80-120	-	
Manganese, Dissolved	104	-	80-120	-	
Nickel, Dissolved	105	-	80-120	-	
Potassium, Dissolved	104	-	80-120	-	
Selenium, Dissolved	112	-	80-120	-	
Silver, Dissolved	105	-	80-120	-	
Sodium, Dissolved	102	-	80-120	-	
Thallium, Dissolved	108	-	80-120	-	
Vanadium, Dissolved	106	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198261-2					
Zinc, Dissolved	112	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198576-2					
Mercury, Dissolved	109	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MS Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 RMW04_011519 QC Batch ID: WG1198177-3 WG1198177-4 QC Sample: L1901865-02 Client ID:												
Aluminum, Total	1.14	2	3.53	120		3.54	120		75-125	0		20
Antimony, Total	0.00364J	0.5	0.5288	106		0.5460	109		75-125	3		20
Arsenic, Total	0.00221	0.12	0.1276	104		0.1333	109		75-125	4		20
Barium, Total	0.4032	2	2.448	102		2.496	105		75-125	2		20
Beryllium, Total	ND	0.05	0.05233	105		0.05326	106		75-125	2		20
Cadmium, Total	ND	0.051	0.05462	107		0.05683	111		75-125	4		20
Calcium, Total	354.	10	379	250	Q	385	310	Q	75-125	2		20
Chromium, Total	0.00644	0.2	0.2042	99		0.2102	102		75-125	3		20
Cobalt, Total	0.00178	0.5	0.4913	98		0.5074	101		75-125	3		20
Copper, Total	0.00712	0.25	0.2391	93		0.2505	97		75-125	5		20
Iron, Total	8.99	1	10.5	151	Q	10.6	161	Q	75-125	1		20
Lead, Total	0.03752	0.51	0.5925	109		0.6042	111		75-125	2		20
Magnesium, Total	52.7	10	67.9	152	Q	69.5	168	Q	75-125	2		20
Manganese, Total	1.036	0.5	1.590	111		1.592	111		75-125	0		20
Nickel, Total	0.00566	0.5	0.4833	96		0.5004	99		75-125	3		20
Potassium, Total	23.1	10	35.0	119		34.8	117		75-125	1		20
Selenium, Total	ND	0.12	0.128	107		0.126	105		75-125	105		20
Silver, Total	ND	0.05	0.04963	99		0.05158	103		75-125	4		20
Sodium, Total	189.	10	218	290	Q	220	310	Q	75-125	1		20
Thallium, Total	0.00024J	0.12	0.1270	106		0.1294	108		75-125	2		20
Vanadium, Total	0.00416J	0.5	0.5211	104		0.5211	104		75-125	0		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 RMW04_011519 QC Batch ID: WG1198177-3 WG1198177-4 QC Sample: L1901865-02 Client ID:									
Zinc, Total	0.01978	0.5	0.6257	121	0.5534	107	75-125	12	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 RMW04_011519 QC Batch ID: WG1198197-3 WG1198197-4 QC Sample: L1901865-02 Client ID:									
Mercury, Total	0.00009J	0.005	0.00464	93	0.00474	95	75-125	2	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198261-3 WG1198261-4 QC Sample: L1901865-02 Client ID: RMW04_011519									
Aluminum, Dissolved	0.00522J	2	2.05	102	2.12	106	75-125	3	20
Antimony, Dissolved	0.00208J	0.5	0.5082	102	0.5344	107	75-125	5	20
Arsenic, Dissolved	0.00149	0.12	0.1281	106	0.1349	111	75-125	5	20
Barium, Dissolved	0.3518	2	2.418	103	2.537	109	75-125	5	20
Beryllium, Dissolved	ND	0.05	0.05236	105	0.05331	107	75-125	2	20
Cadmium, Dissolved	ND	0.051	0.05600	110	0.05904	116	75-125	5	20
Calcium, Dissolved	327.	10	359	320	Q 378	510	Q 75-125	5	20
Chromium, Dissolved	0.00033J	0.2	0.2014	101	0.2090	104	75-125	4	20
Cobalt, Dissolved	0.00059	0.5	0.5014	100	0.5223	104	75-125	4	20
Copper, Dissolved	ND	0.25	0.2378	95	0.2546	102	75-125	7	20
Iron, Dissolved	5.87	1	7.28	141	Q 7.72	185	Q 75-125	6	20
Lead, Dissolved	ND	0.51	0.5540	109	0.5861	115	75-125	6	20
Magnesium, Dissolved	49.6	10	65.7	161	Q 67.8	182	Q 75-125	3	20
Manganese, Dissolved	0.9776	0.5	1.503	105	1.569	118	75-125	4	20
Nickel, Dissolved	0.00233	0.5	0.5027	100	0.5298	105	75-125	5	20
Potassium, Dissolved	21.5	10	33.5	120	35.2	137	Q 75-125	5	20
Selenium, Dissolved	ND	0.12	0.128	107	0.138	115	75-125	8	20
Silver, Dissolved	ND	0.05	0.05164	103	0.05378	108	75-125	4	20
Sodium, Dissolved	181.	10	212	310	Q 218	370	Q 75-125	3	20
Thallium, Dissolved	0.00020J	0.12	0.1280	107	0.1358	113	75-125	6	20
Vanadium, Dissolved	ND	0.5	0.5124	102	0.5361	107	75-125	5	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198261-3 WG1198261-4 QC Sample: L1901865-02 Client ID: RMW04_011519									
Zinc, Dissolved	ND	0.5	0.5276	106	0.5495	110	75-125	4	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198576-3 WG1198576-4 QC Sample: L1901865-02 Client ID: RMW04_011519									
Mercury, Dissolved	ND	0.005	0.00416	83	0.00279	56	Q 75-125	39	Q 20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-01
 Client ID: RMW03_011519
 Sample Location: BRONX, NY

Date Collected: 01/15/19 15:30
 Date Received: 01/15/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.023		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:49	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:28	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-02

Date Collected: 01/15/19 13:00

Client ID: RMW04_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.037		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:50	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:28	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-03

Date Collected: 01/15/19 11:00

Client ID: RMW05_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.007		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:54	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:29	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**SAMPLE RESULTS**

Lab ID: L1901865-04

Date Collected: 01/15/19 00:00

Client ID: GWDUP01_011519

Date Received: 01/15/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.016		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:55	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:29	1,7196A	JT



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1901865

Project Number: 170487001

Report Date: 01/22/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1198028-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/16/19 06:00	01/16/19 06:27	1,7196A	JT
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1198578-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:29	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1198028-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1198578-2 WG1198578-3								
Cyanide, Total	91		98		85-115	7		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198028-3 WG1198028-4 QC Sample: L1901865-02 Client ID: RMW04_011519												
Chromium, Hexavalent	ND	0.1	0.097	97		0.095	95		85-115	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198578-4 WG1198578-5 QC Sample: L1901865-02 Client ID: RMW04_011519												
Cyanide, Total	0.037	0.2	0.225	94		0.227	95		80-120	1		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1901865

Report Date: 01/22/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198028-5 QC Sample: L1901865-02 Client ID: RMW04_011519						
Chromium, Hexavalent	ND	ND	mg/l	NC		20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01221919:18
Lab Number: L1901865
Report Date: 01/22/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-01A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-01B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-01C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-01D	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901865-01E	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-01F	Plastic 500ml unpreserved	B	7	7	3.6	Y	Absent		HEXCR-7196(1)
L1901865-01G	Plastic 250ml NaOH preserved	B	>12	>12	3.6	Y	Absent		TCN-9010(14)
L1901865-01H	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1901865-01I	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1901865-01J	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1901865-01K	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1901865-01L	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-01M	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-01N	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1901865-01O	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1901865-02A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02A1	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02A2	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02B1	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02B2	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02C1	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02C2	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-02D	Plastic 250ml HNO3 preserved	A	<2	<2	2.7	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901865-02D1	Plastic 250ml HNO3 preserved	C	<2	<2	3.4	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901865-02D2	Plastic 250ml HNO3 preserved	C	<2	<2	3.4	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01221919:18
Lab Number: L1901865
Report Date: 01/22/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-02E	Plastic 250ml HNO3 preserved	A	<2	<2	2.7	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-02E1	Plastic 250ml HNO3 preserved	C	<2	<2	3.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-02E2	Plastic 250ml HNO3 preserved	C	<2	<2	3.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-02F	Plastic 500ml unpreserved	A	7	7	2.7	Y	Absent		HEXCR-7196(1)
L1901865-02F1	Plastic 500ml unpreserved	C	7	7	3.4	Y	Absent		HEXCR-7196(1)
L1901865-02F2	Plastic 500ml unpreserved	C	7	7	3.4	Y	Absent		HEXCR-7196(1)
L1901865-02G	Plastic 250ml NaOH preserved	A	>12	>12	2.7	Y	Absent		TCN-9010(14)
L1901865-02G1	Plastic 250ml NaOH preserved	C	>12	>12	3.4	Y	Absent		TCN-9010(14)
L1901865-02G2	Plastic 250ml NaOH preserved	C	>12	>12	3.4	Y	Absent		TCN-9010(14)
L1901865-02H	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02H1	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02H2	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02I	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02I1	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02I2	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8082-LVI(7)
L1901865-02J	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8081(7)

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1901865**Project Number:** 170487001**Report Date:** 01/22/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-02J1	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8081(7)
L1901865-02J2	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8081(7)
L1901865-02K	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8081(7)
L1901865-02K1	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8081(7)
L1901865-02K2	Amber 120ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8081(7)
L1901865-02L	Amber 250ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02L1	Amber 250ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02L2	Amber 250ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02M	Amber 250ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02M1	Amber 250ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02M2	Amber 250ml unpreserved	C	7	7	3.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-02N	Amber 1000ml unpreserved	A	7	7	2.7	Y	Absent		HERB-APA(7)
L1901865-02N1	Amber 1000ml unpreserved	C	7	7	3.4	Y	Absent		HERB-APA(7)
L1901865-02N2	Amber 1000ml unpreserved	C	7	7	3.4	Y	Absent		HERB-APA(7)
L1901865-02O	Amber 1000ml unpreserved	A	7	7	2.7	Y	Absent		HERB-APA(7)
L1901865-02O1	Amber 1000ml unpreserved	C	7	7	3.4	Y	Absent		HERB-APA(7)
L1901865-02O2	Amber 1000ml unpreserved	C	7	7	3.4	Y	Absent		HERB-APA(7)
L1901865-03A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-03B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-03C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-03D	Plastic 250ml HNO3 preserved	A	<2	<2	2.7	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)

Project Name: GERARD AVE. + E. 146TH ST.
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Serial_No:01221919:18
Lab Number: L1901865
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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-03E	Plastic 250ml HNO3 preserved	A	<2	<2	2.7	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1901865-03F	Plastic 500ml unpreserved	A	7	7	2.7	Y	Absent		HEXCR-7196(1)
L1901865-03G	Plastic 250ml NaOH preserved	A	>12	>12	2.7	Y	Absent		TCN-9010(14)
L1901865-03H	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8082-LVI(7)
L1901865-03I	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8082-LVI(7)
L1901865-03J	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8081(7)
L1901865-03K	Amber 120ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8081(7)
L1901865-03L	Amber 250ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-03M	Amber 250ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-03N	Amber 1000ml unpreserved	A	7	7	2.7	Y	Absent		HERB-APA(7)
L1901865-03O	Amber 1000ml unpreserved	A	7	7	2.7	Y	Absent		HERB-APA(7)
L1901865-04A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-04B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-04C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-04D	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1901865-04E	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01221919:18
Lab Number: L1901865
Report Date: 01/22/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901865-04F	Plastic 500ml unpreserved	B	7	7	3.6	Y	Absent		HEXCR-7196(1)
L1901865-04G	Plastic 250ml NaOH preserved	B	>12	>12	3.6	Y	Absent		TCN-9010(14)
L1901865-04H	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1901865-04I	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1901865-04J	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1901865-04K	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1901865-04L	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-04M	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1901865-04N	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1901865-04O	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1901865-05A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1901865-05B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)

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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
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Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1901865
Report Date: 01/22/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #										
		1 of 1	1/15/19	L1901865										
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information		Deliverables	Billing Information									
Client Information		Project Name: Gerard Ave. + E. 146th St.		<input checked="" type="checkbox"/> ASP-A <input type="checkbox"/> EQulS (1 File) <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Same as Client Info PO #									
Client: Langan Engineering		Project Location: Bronx NY		<input type="checkbox"/> NY TOGS <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:									
Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727		Project Manager: Julia Leung		<input type="checkbox"/> NY Part 375 <input type="checkbox"/> NY CP-51 <input type="checkbox"/> Other										
Phone: (212) 479-5400		Project # 170487001		Regulatory Requirement										
Fax: (212) 479-5444		(Use Project name as Project #) <input checked="" type="checkbox"/>		Disposal Site Information										
Email: jleung@langan.com		ALPHAQuote #: 7013		Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:										
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:														
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.			ANALYSIS											
			Part 375/TCL VOCs Part 375/TCL SVOCs Part 375/TCL PCBs Pesticides Herbicides TAL Metals Hexavalent Chromium Total Cyanide											
			<input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)											
			Sample Specific Comments											
			Total Bottles											
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide	Sample Specific Comments
01865-01	RMW03_011519	1/15/19	1530	GW	JL	X	X	X	X	X	X	X	X	
02	RMW04_011519		1300		JL									
03	RMW05_011519		1100		JL									Collateral MS/MSD
04	GWDP01_011519		-		JL									
05	GWTC02_011519		-	AG	JL	X								
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)				
		Relinquished By:		Date/Time		Received By:		Date/Time						
		J.L.		1/15/19 - 330		J.L.		1/15/19 15:30						
		P.S.		1/15/19 - 17:45		D. Santos		1/15/19 19:00						
		D. Santos AAC		1/15/19 22:30		[Signature]		1/15/19 22:30						



ANALYTICAL REPORT

Lab Number:	L1902070
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487003
Report Date:	01/25/19

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Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1902070-01	RMW01_011619	WATER	BRONX, NY	01/16/19 10:00	01/16/19
L1902070-02	RMW07_011619	WATER	BRONX, NY	01/16/19 12:00	01/16/19
L1902070-03	RMW09_011619	WATER	BRONX, NY	01/16/19 15:00	01/16/19
L1902070-04	GWFB02_011619	WATER	BRONX, NY	01/16/19 12:45	01/16/19
L1902070-05	GWTB03_011619	WATER	BRONX, NY	01/16/19 00:00	01/16/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Case Narrative (continued)

Report Submission

January 25, 2019: This final report includes the results of all requested analyses.

January 25, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1902070-03: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Semivolatile Organics by SIM

L1902070-04: Naphthalene was identified in the Field Blank. The sample vial was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

Perfluorinated Alkyl Acids by Isotope Dilution

L1902070-03 and WG1198461-2/-3: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

L1902070-04: The Field Blank has a concentration above the reporting limit for 1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS). The result was confirmed.

WG1198573-11: The continuing calibration standard, associated with L1902070 and QC, had the response for the extracted internal standard (Perfluoro[1,2-¹³C₂]Tetradecanoic Acid (M2PFTEDA) (158.7%) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria, therefore no further action was taken.

Total Metals

L1902070-04: The Field Blank has results for barium and manganese present above the reporting limits. The

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Case Narrative (continued)

sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

Dissolved Metals

L1902070-04: The Field Blank has a result for barium present above the reporting limit. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

The WG1198536-3 MS recoveries for calcium (240%), magnesium (134%), and sodium (270%), performed on L1902070-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1198536-3 MS recovery, performed on L1902070-01, is outside the acceptance criteria for selenium (35%). A post digestion spike was performed and was within acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/25/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/18/19 20:54
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	2.5		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	0.97	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	0.97	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	2.1	J	ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	4.3		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	1.3	J	ug/l	2.0	0.70	1
p-Ethyltoluene	5.4		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	10		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	90		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/18/19 21:30
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	91		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03 D
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/21/19 13:22
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	50	14.	20
1,1-Dichloroethane	ND		ug/l	50	14.	20
Chloroform	ND		ug/l	50	14.	20
Carbon tetrachloride	ND		ug/l	10	2.7	20
1,2-Dichloropropane	ND		ug/l	20	2.7	20
Dibromochloromethane	ND		ug/l	10	3.0	20
1,1,2-Trichloroethane	ND		ug/l	30	10.	20
Tetrachloroethene	ND		ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	ND		ug/l	10	2.6	20
1,1,1-Trichloroethane	ND		ug/l	50	14.	20
Bromodichloromethane	ND		ug/l	10	3.8	20
trans-1,3-Dichloropropene	ND		ug/l	10	3.3	20
cis-1,3-Dichloropropene	ND		ug/l	10	2.9	20
1,3-Dichloropropene, Total	ND		ug/l	10	2.9	20
1,1-Dichloropropene	ND		ug/l	50	14.	20
Bromoform	ND		ug/l	40	13.	20
1,1,2,2-Tetrachloroethane	ND		ug/l	10	3.3	20
Benzene	840		ug/l	10	3.2	20
Toluene	48	J	ug/l	50	14.	20
Ethylbenzene	130		ug/l	50	14.	20
Chloromethane	ND		ug/l	50	14.	20
Bromomethane	ND		ug/l	50	14.	20
Vinyl chloride	ND		ug/l	20	1.4	20
Chloroethane	ND		ug/l	50	14.	20
1,1-Dichloroethene	ND		ug/l	10	3.4	20
trans-1,2-Dichloroethene	ND		ug/l	50	14.	20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03 D

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20
1,3-Dichlorobenzene	ND		ug/l	50	14.	20
1,4-Dichlorobenzene	ND		ug/l	50	14.	20
Methyl tert butyl ether	ND		ug/l	50	14.	20
p/m-Xylene	28	J	ug/l	50	14.	20
o-Xylene	ND		ug/l	50	14.	20
Xylenes, Total	28	J	ug/l	50	14.	20
cis-1,2-Dichloroethene	ND		ug/l	50	14.	20
1,2-Dichloroethene, Total	ND		ug/l	50	14.	20
Dibromomethane	ND		ug/l	100	20.	20
1,2,3-Trichloropropane	ND		ug/l	50	14.	20
Acrylonitrile	ND		ug/l	100	30.	20
Styrene	ND		ug/l	50	14.	20
Dichlorodifluoromethane	ND		ug/l	100	20.	20
Acetone	ND		ug/l	100	29.	20
Carbon disulfide	ND		ug/l	100	20.	20
2-Butanone	ND		ug/l	100	39.	20
Vinyl acetate	ND		ug/l	100	20.	20
4-Methyl-2-pentanone	ND		ug/l	100	20.	20
2-Hexanone	ND		ug/l	100	20.	20
Bromochloromethane	ND		ug/l	50	14.	20
2,2-Dichloropropane	ND		ug/l	50	14.	20
1,2-Dibromoethane	ND		ug/l	40	13.	20
1,3-Dichloropropane	ND		ug/l	50	14.	20
1,1,1,2-Tetrachloroethane	ND		ug/l	50	14.	20
Bromobenzene	ND		ug/l	50	14.	20
n-Butylbenzene	ND		ug/l	50	14.	20
sec-Butylbenzene	ND		ug/l	50	14.	20
tert-Butylbenzene	ND		ug/l	50	14.	20
o-Chlorotoluene	ND		ug/l	50	14.	20
p-Chlorotoluene	ND		ug/l	50	14.	20
1,2-Dibromo-3-chloropropane	ND		ug/l	50	14.	20
Hexachlorobutadiene	ND		ug/l	50	14.	20
Isopropylbenzene	130		ug/l	50	14.	20
p-Isopropyltoluene	ND		ug/l	50	14.	20
Naphthalene	370		ug/l	50	14.	20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03 D
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	220		ug/l	50	14.	20
1,2,3-Trichlorobenzene	ND		ug/l	50	14.	20
1,2,4-Trichlorobenzene	ND		ug/l	50	14.	20
1,3,5-Trimethylbenzene	ND		ug/l	50	14.	20
1,2,4-Trimethylbenzene	ND		ug/l	50	14.	20
1,4-Dioxane	ND		ug/l	5000	1200	20
p-Diethylbenzene	ND		ug/l	40	14.	20
p-Ethyltoluene	24	J	ug/l	40	14.	20
1,2,4,5-Tetramethylbenzene	66		ug/l	40	11.	20
Ethyl ether	ND		ug/l	50	14.	20
trans-1,4-Dichloro-2-butene	ND		ug/l	50	14.	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 13:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-05
 Client ID: GWTB03_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 00:00
 Date Received: 01/16/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/17/19 14:20
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-05
 Client ID: GWTB03_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 00:00
 Date Received: 01/16/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-05
 Client ID: GWTB03_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 00:00
 Date Received: 01/16/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/17/19 09:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-05 Batch: WG1198696-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/17/19 09:13
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-05 Batch: WG1198696-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/17/19 09:13
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-05 Batch: WG1198696-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/18/19 12:25
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1198987-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/18/19 12:25
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1198987-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/18/19 12:25
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1198987-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/21/19 09:40
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1199885-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/21/19 09:40
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1199885-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/21/19 09:40
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1199885-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-05 Batch: WG1198696-3 WG1198696-4								
Methylene chloride	92		91		70-130	1		20
1,1-Dichloroethane	96		98		70-130	2		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	90		93		63-132	3		20
1,2-Dichloropropane	96		100		70-130	4		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	95		98		70-130	3		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	72		75		62-150	4		20
1,2-Dichloroethane	95		100		70-130	5		20
1,1,1-Trichloroethane	94		95		67-130	1		20
Bromodichloromethane	96		98		67-130	2		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	93		97		70-130	4		20
1,1-Dichloropropene	89		92		70-130	3		20
Bromoform	99		100		54-136	1		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	91		94		70-130	3		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		100		70-130	1		20
Chloromethane	54	Q	55	Q	64-130	2		20
Bromomethane	43		29	Q	39-139	39	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-05 Batch: WG1198696-3 WG1198696-4								
Vinyl chloride	75		75		55-140	0		20
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	78		80		61-145	3		20
trans-1,2-Dichloroethene	90		94		70-130	4		20
Trichloroethene	93		96		70-130	3		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	93		100		63-130	7		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	95		97		70-130	2		20
Dibromomethane	94		98		70-130	4		20
1,2,3-Trichloropropane	100		110		64-130	10		20
Acrylonitrile	92		100		70-130	8		20
Styrene	90		95		70-130	5		20
Dichlorodifluoromethane	56		57		36-147	2		20
Acetone	83		75		58-148	10		20
Carbon disulfide	81		82		51-130	1		20
2-Butanone	93		98		63-138	5		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	88		110		59-130	22	Q	20
2-Hexanone	80		96		57-130	18		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-05 Batch: WG1198696-3 WG1198696-4								
Bromochloromethane	99		100		70-130	1		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	96		100		70-130	4		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	98		100		53-136	2		20
sec-Butylbenzene	99		100		70-130	1		20
tert-Butylbenzene	97		98		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	88		100		41-144	13		20
Hexachlorobutadiene	80		80		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	96		97		70-130	1		20
Naphthalene	84		93		70-130	10		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	86		91		70-130	6		20
1,2,4-Trichlorobenzene	88		89		70-130	1		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	100		100		56-162	0		20
p-Diethylbenzene	93		95		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-05 Batch: WG1198696-3 WG1198696-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	88		89		70-130	1		20
Ethyl ether	86		91		59-134	6		20
trans-1,4-Dichloro-2-butene	96		100		70-130	4		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	96		93		70-130
Dibromofluoromethane	99		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1198987-3 WG1198987-4								
Methylene chloride	96		91		70-130	5		20
1,1-Dichloroethane	100		96		70-130	4		20
Chloroform	96		92		70-130	4		20
Carbon tetrachloride	81		78		63-132	4		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	96		95		63-130	1		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	86		85		70-130	1		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	81		78		62-150	4		20
1,2-Dichloroethane	97		96		70-130	1		20
1,1,1-Trichloroethane	86		84		67-130	2		20
Bromodichloromethane	97		93		67-130	4		20
trans-1,3-Dichloropropene	91		89		70-130	2		20
cis-1,3-Dichloropropene	88		86		70-130	2		20
1,1-Dichloropropene	93		92		70-130	1		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	120		120		67-130	0		20
Benzene	97		94		70-130	3		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	75		72		64-130	4		20
Bromomethane	51		45		39-139	13		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1198987-3 WG1198987-4								
Vinyl chloride	87		83		55-140	5		20
Chloroethane	98		94		55-138	4		20
1,1-Dichloroethene	87		84		61-145	4		20
trans-1,2-Dichloroethene	92		91		70-130	1		20
Trichloroethene	91		90		70-130	1		20
1,2-Dichlorobenzene	100		110		70-130	10		20
1,3-Dichlorobenzene	110		110		70-130	0		20
1,4-Dichlorobenzene	110		110		70-130	0		20
Methyl tert butyl ether	81		81		63-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	94		92		70-130	2		20
Dibromomethane	91		91		70-130	0		20
1,2,3-Trichloropropane	120		120		64-130	0		20
Acrylonitrile	100		100		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	74		70		36-147	6		20
Acetone	110		110		58-148	0		20
Carbon disulfide	84		80		51-130	5		20
2-Butanone	120		120		63-138	0		20
Vinyl acetate	120		120		70-130	0		20
4-Methyl-2-pentanone	110		110		59-130	0		20
2-Hexanone	120		120		57-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1198987-3 WG1198987-4								
Bromochloromethane	92		91		70-130	1		20
2,2-Dichloropropane	66		62	Q	63-133	6		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	99		97		64-130	2		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	110		120		53-136	9		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	110		110		70-130	0		20
o-Chlorotoluene	120		120		70-130	0		20
p-Chlorotoluene	120		120		70-130	0		20
1,2-Dibromo-3-chloropropane	93		99		41-144	6		20
Hexachlorobutadiene	94		92		63-130	2		20
Isopropylbenzene	110		120		70-130	9		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	110		120		70-130	9		20
n-Propylbenzene	120		120		69-130	0		20
1,2,3-Trichlorobenzene	100		110		70-130	10		20
1,2,4-Trichlorobenzene	100		110		70-130	10		20
1,3,5-Trimethylbenzene	110		120		64-130	9		20
1,2,4-Trimethylbenzene	110		120		70-130	9		20
1,4-Dioxane	112		116		56-162	4		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1198987-3 WG1198987-4								
p-Ethyltoluene	110		120		70-130	9		20
1,2,4,5-Tetramethylbenzene	110		120		70-130	9		20
Ethyl ether	96		97		59-134	1		20
trans-1,4-Dichloro-2-butene	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
Toluene-d8	108		108		70-130
4-Bromofluorobenzene	111		110		70-130
Dibromofluoromethane	92		91		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1199885-3 WG1199885-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	91		91		63-132	0		20
1,2-Dichloropropane	98		100		70-130	2		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	94		95		70-130	1		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	85		87		62-150	2		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	95		97		67-130	2		20
Bromodichloromethane	99		98		67-130	1		20
trans-1,3-Dichloropropene	100		99		70-130	1		20
cis-1,3-Dichloropropene	98		96		70-130	2		20
1,1-Dichloropropene	92		93		70-130	1		20
Bromoform	100		98		54-136	2		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	97		99		70-130	2		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	76		77		64-130	1		20
Bromomethane	32	Q	36	Q	39-139	12		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1199885-3 WG1199885-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	120		130		55-138	8		20
1,1-Dichloroethene	93		93		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	96		100		70-130	4		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	98		98		63-130	0		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	97		96		70-130	1		20
1,2,3-Trichloropropane	100		100		64-130	0		20
Acrylonitrile	100		95		70-130	5		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	85		85		36-147	0		20
Acetone	62		65		58-148	5		20
Carbon disulfide	120		120		51-130	0		20
2-Butanone	84		82		63-138	2		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	88		86		59-130	2		20
2-Hexanone	80		81		57-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1199885-3 WG1199885-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	97		96		70-130	1		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	93		94		53-136	1		20
sec-Butylbenzene	95		95		70-130	0		20
tert-Butylbenzene	94		95		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	86		90		41-144	5		20
Hexachlorobutadiene	71		74		63-130	4		20
Isopropylbenzene	98		99		70-130	1		20
p-Isopropyltoluene	93		95		70-130	2		20
Naphthalene	84		83		70-130	1		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	88		86		70-130	2		20
1,2,4-Trichlorobenzene	88		88		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	64		92		56-162	36	Q	20
p-Diethylbenzene	90		91		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1199885-3 WG1199885-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	90		89		70-130	1		20
Ethyl ether	98		100		59-134	2		20
trans-1,4-Dichloro-2-butene	100		97		70-130	3		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		95		70-130
Toluene-d8	100		102		70-130
4-Bromofluorobenzene	95		94		70-130
Dibromofluoromethane	97		97		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/19/19 09:05
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	77		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 21:21
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	32		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	2.6		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.52		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.30		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.14		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.14		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.06	J	ug/l	0.10	0.01	1
Chrysene	0.31		ug/l	0.10	0.01	1
Acenaphthylene	3.3		ug/l	0.10	0.01	1
Anthracene	0.85		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.10		ug/l	0.10	0.01	1
Fluorene	1.3		ug/l	0.10	0.01	1
Phenanthrene	0.52		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.03	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.08	J	ug/l	0.10	0.01	1
Pyrene	3.6		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-01

Date Collected: 01/16/19 10:00

Client ID: RMW01_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	84		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/19/19 09:32
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	76		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 13:05
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0326	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 21:48
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.03	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.11		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.06	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.04	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.06	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.05	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.01	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.04	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.06	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Pyrene	0.11		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	85		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
Client ID: RMW07_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 03:00
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	4.73		ng/l	1.82	0.339	1
Perfluoropentanoic Acid (PFPeA)	1.73	J	ng/l	1.82	0.422	1
Perfluorobutanesulfonic Acid (PFBS)	3.49		ng/l	1.82	0.345	1
Perfluorohexanoic Acid (PFHxA)	1.66	J	ng/l	1.82	0.447	1
Perfluoroheptanoic Acid (PFHpA)	1.42	J	ng/l	1.82	0.338	1
Perfluorohexanesulfonic Acid (PFHxS)	0.782	J	ng/l	1.82	0.396	1
Perfluorooctanoic Acid (PFOA)	10.8		ng/l	1.82	0.418	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.79	J	ng/l	1.82	0.176	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.82	0.473	1
Perfluorononanoic Acid (PFNA)	0.600	J	ng/l	1.82	0.396	1
Perfluorooctanesulfonic Acid (PFOS)	7.55		ng/l	1.82	0.509	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.82	0.564	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.82	0.264	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.82	0.228	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.82	0.385	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.82	0.351	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.82	0.505	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.82	0.339	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.82	0.538	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.82	0.285	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.82	0.898	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	93		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	101		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	74		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	129		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	98		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	78		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	98		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	100		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	89		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	121		33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/19/19 09:59
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	9.5		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	1.5	J	ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		21-120
Phenol-d6	70		10-120
Nitrobenzene-d5	113		23-120
2-Fluorobiphenyl	94		15-120
2,4,6-Tribromophenol	132	Q	10-120
4-Terphenyl-d14	87		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 13:56
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0314	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	20		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 22:14
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.28		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.48		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	130	E	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.10	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.10		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Chrysene	0.10		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.32		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.05	J	ug/l	0.10	0.01	1
Fluorene	0.19		ug/l	0.10	0.01	1
Phenanthrene	1.3		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.01	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Pyrene	0.40		ug/l	0.10	0.02	1
2-Methylnaphthalene	64		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	87		15-120
2,4,6-Tribromophenol	33		10-120
4-Terphenyl-d14	89		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
Client ID: RMW09_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 03:17
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	7.08		ng/l	2.07	0.387	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.07	0.481	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.07	0.394	1
Perfluorohexanoic Acid (PFHxA)	2.16		ng/l	2.07	0.510	1
Perfluoroheptanoic Acid (PFHpA)	1.76	J	ng/l	2.07	0.386	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.07	0.452	1
Perfluorooctanoic Acid (PFOA)	17.6		ng/l	2.07	0.477	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.57	J	ng/l	2.07	0.201	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.07	0.539	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.07	0.452	1
Perfluorooctanesulfonic Acid (PFOS)	4.19		ng/l	2.07	0.581	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.07	0.643	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.07	0.302	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.07	0.260	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.07	0.440	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.07	0.400	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.07	0.577	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	1.71	J	ng/l	2.07	0.387	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.07	0.614	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.07	0.326	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.07	1.02	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	85		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	83		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	68		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	74		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	91		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	220		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	113		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	191	Q	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	120		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	90		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	46		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	115		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	75		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	107		33-143

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03 D

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM

Extraction Date: 01/17/19 19:06

Analytical Date: 01/23/19 12:55

Analyst: CB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	290		ug/l	1.0	0.49	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/19/19 10:26
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	67		10-120
4-Terphenyl-d14	74		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/18/19 14:22
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0326	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/20/19 22:41
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.10		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-04

Date Collected: 01/16/19 12:45

Client ID: GWFB02_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	94		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
Client ID: GWFB02_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 01/20/19 00:15
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.94	0.363	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.94	0.451	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.94	0.370	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.94	0.478	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.94	0.362	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.94	0.424	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.94	0.447	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	2.08		ng/l	1.94	0.189	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.94	0.506	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.94	0.424	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.94	0.545	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.94	0.603	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.94	0.283	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.428	J	ng/l	1.94	0.244	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.94	0.412	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.94	0.375	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.94	0.541	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.650	J	ng/l	1.94	0.363	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.94	0.576	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.94	0.305	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.94	0.961	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	100		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	95		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	99		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	74		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	107		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	105		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	72		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	102		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	109		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	22		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	94		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	112		33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/18/19 09:39
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02-04 Batch: WG1198434-1					
1,4-Dioxane	ND		ug/l	0.150	0.0339

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	33		15-110

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 01/19/19 20:56
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 02-04 Batch: WG1198461-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.373
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.464
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.380
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.492
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.372
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.436
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.460
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	1.28	J	ng/l	2.00	0.194
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.520
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.436
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.560
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.620
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.291
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.250
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.424
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.386
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.556
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.373
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.592
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.314
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.988

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 01/19/19 20:56
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 01/17/19 09:20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 02-04 Batch: WG1198461-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	115		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	123		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	124		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	100		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	110		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	111		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	117		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	108		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	113		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	136		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	118		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	112		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	134		33-143

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/21/19 13:27
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198691-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/21/19 13:27
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198691-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/21/19 13:27
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198691-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	53		10-120
4-Terphenyl-d14	69		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D-SIM
Analytical Date: 01/20/19 17:23
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1198692-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/20/19 17:23
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 19:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1198692-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	85		41-149

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 02-04 Batch: WG1198434-2 WG1198434-3								
1,4-Dioxane	110		115		40-140	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	27		23		15-110



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 02-04 Batch: WG1198461-2 WG1198461-3								
Perfluorobutanoic Acid (PFBA)	84		93		67-148	10		30
Perfluoropentanoic Acid (PFPeA)	88		96		63-161	9		30
Perfluorobutanesulfonic Acid (PFBS)	82		90		65-157	9		30
Perfluorohexanoic Acid (PFHxA)	90		98		69-168	9		30
Perfluoroheptanoic Acid (PFHpA)	78		84		58-159	7		30
Perfluorohexanesulfonic Acid (PFHxS)	84		92		69-177	9		30
Perfluorooctanoic Acid (PFOA)	82		88		63-159	7		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	102		101		49-187	1		30
Perfluoroheptanesulfonic Acid (PFHpS)	77		95		61-179	21		30
Perfluorononanoic Acid (PFNA)	84		90		68-171	7		30
Perfluorooctanesulfonic Acid (PFOS)	68		76		52-151	11		30
Perfluorodecanoic Acid (PFDA)	86		96		63-171	11		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	90		100		56-173	11		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	78		82		60-166	5		30
Perfluoroundecanoic Acid (PFUnA)	76		82		60-153	8		30
Perfluorodecanesulfonic Acid (PFDS)	88		89		38-156	1		30
Perfluorooctanesulfonamide (FOSA)	79		90		46-170	13		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	80		84		45-170	5		30
Perfluorododecanoic Acid (PFDoA)	78		86		67-153	10		30
Perfluorotridecanoic Acid (PFTrDA)	95		115		48-158	19		30
Perfluorotetradecanoic Acid (PFTA)	94		98		59-182	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits			Qual	Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 02-04 Batch: WG1198461-2 WG1198461-3									

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		108		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		114		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	107		110		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		90		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		97		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	105		111		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		103		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		112		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	123		114		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	107		101		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	106		96		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	97		96		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	95		78		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	124		111		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	36		44		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	93		80		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	106		88		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	153	Q	154	Q	33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198691-2 WG1198691-3								
Acenaphthene	76		87		37-111	13		30
1,2,4-Trichlorobenzene	76		85		39-98	11		30
Hexachlorobenzene	82		94		40-140	14		30
Bis(2-chloroethyl)ether	73		86		40-140	16		30
2-Chloronaphthalene	87		99		40-140	13		30
1,2-Dichlorobenzene	73		85		40-140	15		30
1,3-Dichlorobenzene	71		80		40-140	12		30
1,4-Dichlorobenzene	69		83		36-97	18		30
3,3'-Dichlorobenzidine	44		59		40-140	29		30
2,4-Dinitrotoluene	82		90		48-143	9		30
2,6-Dinitrotoluene	92		101		40-140	9		30
Fluoranthene	78		87		40-140	11		30
4-Chlorophenyl phenyl ether	81		90		40-140	11		30
4-Bromophenyl phenyl ether	85		94		40-140	10		30
Bis(2-chloroisopropyl)ether	73		82		40-140	12		30
Bis(2-chloroethoxy)methane	77		88		40-140	13		30
Hexachlorobutadiene	81		95		40-140	16		30
Hexachlorocyclopentadiene	76		90		40-140	17		30
Hexachloroethane	73		84		40-140	14		30
Isophorone	86		98		40-140	13		30
Naphthalene	78		90		40-140	14		30
Nitrobenzene	82		93		40-140	13		30
NDPA/DPA	74		88		40-140	17		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198691-2 WG1198691-3								
n-Nitrosodi-n-propylamine	89		100		29-132	12		30
Bis(2-ethylhexyl)phthalate	88		94		40-140	7		30
Butyl benzyl phthalate	93		104		40-140	11		30
Di-n-butylphthalate	82		90		40-140	9		30
Di-n-octylphthalate	91		98		40-140	7		30
Diethyl phthalate	90		98		40-140	9		30
Dimethyl phthalate	94		104		40-140	10		30
Benzo(a)anthracene	84		93		40-140	10		30
Benzo(a)pyrene	80		91		40-140	13		30
Benzo(b)fluoranthene	85		96		40-140	12		30
Benzo(k)fluoranthene	81		92		40-140	13		30
Chrysene	79		84		40-140	6		30
Acenaphthylene	86		96		45-123	11		30
Anthracene	80		88		40-140	10		30
Benzo(ghi)perylene	85		90		40-140	6		30
Fluorene	80		92		40-140	14		30
Phenanthrene	79		85		40-140	7		30
Dibenzo(a,h)anthracene	84		92		40-140	9		30
Indeno(1,2,3-cd)pyrene	78		83		40-140	6		30
Pyrene	74		83		26-127	11		30
Biphenyl	81		92		40-140	13		30
4-Chloroaniline	45		66		40-140	38	Q	30
2-Nitroaniline	96		102		52-143	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198691-2 WG1198691-3								
3-Nitroaniline	62		78		25-145	23		30
4-Nitroaniline	72		83		51-143	14		30
Dibenzofuran	77		87		40-140	12		30
2-Methylnaphthalene	81		94		40-140	15		30
1,2,4,5-Tetrachlorobenzene	81		93		2-134	14		30
Acetophenone	84		94		39-129	11		30
2,4,6-Trichlorophenol	89		103		30-130	15		30
p-Chloro-m-cresol	90		105	Q	23-97	15		30
2-Chlorophenol	79		95		27-123	18		30
2,4-Dichlorophenol	87		97		30-130	11		30
2,4-Dimethylphenol	10	Q	29	Q	30-130	97	Q	30
2-Nitrophenol	90		104		30-130	14		30
4-Nitrophenol	87	Q	101	Q	10-80	15		30
2,4-Dinitrophenol	90		78		20-130	14		30
4,6-Dinitro-o-cresol	88		92		20-164	4		30
Pentachlorophenol	83		75		9-103	10		30
Phenol	64		74		12-110	14		30
2-Methylphenol	61		78		30-130	24		30
3-Methylphenol/4-Methylphenol	76		93		30-130	20		30
2,4,5-Trichlorophenol	93		106		30-130	13		30
Benzoic Acid	80		63		10-164	24		30
Benzyl Alcohol	90		100		26-116	11		30
Carbazole	82		90		55-144	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198691-2 WG1198691-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	72		86		21-120
Phenol-d6	63		75		10-120
Nitrobenzene-d5	83		94		23-120
2-Fluorobiphenyl	87		96		15-120
2,4,6-Tribromophenol	87		101		10-120
4-Terphenyl-d14	71		80		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1198692-2 WG1198692-3								
Acenaphthene	68		80		40-140	16		40
2-Chloronaphthalene	81		96		40-140	17		40
Fluoranthene	77		95		40-140	21		40
Hexachlorobutadiene	75		86		40-140	14		40
Naphthalene	74		85		40-140	14		40
Benzo(a)anthracene	72		90		40-140	22		40
Benzo(a)pyrene	74		92		40-140	22		40
Benzo(b)fluoranthene	63		78		40-140	21		40
Benzo(k)fluoranthene	69		85		40-140	21		40
Chrysene	71		87		40-140	20		40
Acenaphthylene	83		100		40-140	19		40
Anthracene	73		90		40-140	21		40
Benzo(ghi)perylene	67		85		40-140	24		40
Fluorene	71		86		40-140	19		40
Phenanthrene	72		88		40-140	20		40
Dibenzo(a,h)anthracene	67		85		40-140	24		40
Indeno(1,2,3-cd)pyrene	80		100		40-140	22		40
Pyrene	78		96		40-140	21		40
2-Methylnaphthalene	80		93		40-140	15		40
Pentachlorophenol	58		71		40-140	20		40
Hexachlorobenzene	73		89		40-140	20		40
Hexachloroethane	62		71		40-140	14		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1198692-2 WG1198692-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
2-Fluorophenol	58		67		21-120
Phenol-d6	46		55		10-120
Nitrobenzene-d5	78		91		23-120
2-Fluorobiphenyl	84		98		15-120
2,4,6-Tribromophenol	75		93		10-120
4-Terphenyl-d14	81		98		41-149

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
Client ID: RMW01_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/21/19 16:25
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 10:26
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	105		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 01/21/19 16:39
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 10:26
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/17/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
Client ID: RMW09_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/21/19 16:52
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 10:26
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	96		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
Client ID: GWFB02_011619
Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
Date Received: 01/16/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/21/19 17:06
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 10:26
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	85		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 01/21/19 00:41
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 01/17/19 04:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/17/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/18/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198386-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	82		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198386-2 WG1198386-3									
Aroclor 1016	75		66		40-140	13		50	A
Aroclor 1260	79		71		40-140	11		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		76		30-150	A
Decachlorobiphenyl	100		83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		80		30-150	B
Decachlorobiphenyl	99		90		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/19/19 13:38
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 10:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-01

Date Collected: 01/16/19 10:00

Client ID: RMW01_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	42		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 22:20
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	73		30-150	A
DCAA	65		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/19/19 13:51
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 10:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02

Date Collected: 01/16/19 12:00

Client ID: RMW07_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	57		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 22:39
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/19/19 14:03
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 10:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	46		30-150	B
Decachlorobiphenyl	50		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 22:58
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/19/19 14:16
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 01/17/19 10:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-04

Date Collected: 01/16/19 12:45

Client ID: GWFB02_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/19/19 23:17
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	108		30-150	A
DCAA	85		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/17/19 12:54
Analyst: SL

Extraction Method: EPA 3510C
Extraction Date: 01/16/19 20:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198332-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 01/17/19 12:54
 Analyst: SL

Extraction Method: EPA 3510C
 Extraction Date: 01/16/19 20:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1198332-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	91		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/19/19 21:24
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/18/19 17:21

Methylation Date: 01/19/19 07:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1199049-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	90		30-150	A
DCAA	75		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198332-2 WG1198332-3									
Delta-BHC	84		82		30-150	3		20	A
Lindane	84		83		30-150	2		20	A
Alpha-BHC	86		86		30-150	0		20	A
Beta-BHC	79		76		30-150	4		20	A
Heptachlor	82		82		30-150	0		20	A
Aldrin	80		80		30-150	0		20	A
Heptachlor epoxide	87		84		30-150	3		20	A
Endrin	88		86		30-150	2		20	A
Endrin aldehyde	71		70		30-150	2		20	A
Endrin ketone	91		90		30-150	1		20	A
Dieldrin	95		94		30-150	1		20	A
4,4'-DDE	87		85		30-150	2		20	A
4,4'-DDD	86		83		30-150	3		20	A
4,4'-DDT	90		87		30-150	3		20	A
Endosulfan I	81		80		30-150	2		20	A
Endosulfan II	82		82		30-150	1		20	A
Endosulfan sulfate	80		78		30-150	2		20	A
Methoxychlor	107		103		30-150	4		20	A
cis-Chlordane	77		76		30-150	2		20	A
trans-Chlordane	82		80		30-150	3		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1198332-2 WG1198332-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	68		68		30-150	A
Decachlorobiphenyl	92		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		76		30-150	B
Decachlorobiphenyl	95		79		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1199049-2 WG1199049-3									
2,4-D	92		86		30-150	7		25	A
2,4,5-T	95		91		30-150	4		25	A
2,4,5-TP (Silvex)	88		86		30-150	2		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	94		96		30-150	A
DCAA	95		85		30-150	B

METALS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.154		mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Antimony, Total	0.00055	J	mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00049	J	mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Barium, Total	0.3830		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Calcium, Total	481.		mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Chromium, Total	0.00090	J	mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00023	J	mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Copper, Total	0.00202		mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Iron, Total	1.56		mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Lead, Total	0.00396		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Magnesium, Total	62.4		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Manganese, Total	0.5704		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 13:26	EPA 7470A	1,7470A	MG
Nickel, Total	0.00216		mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Potassium, Total	25.7		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Sodium, Total	523.		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 12:24	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/18/19 12:24	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00439	J	mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00100	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00035	J	mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.3570		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Calcium, Dissolved	457.		mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00031	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Iron, Dissolved	1.04		mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	60.4		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.5404		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:57	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00131	J	mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Potassium, Dissolved	24.5		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Sodium, Dissolved	517.		mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:46	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.294		mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Antimony, Total	0.00200	J	mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00165		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Barium, Total	0.1446		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00019	J	mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Calcium, Total	147.		mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Chromium, Total	0.00139		mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00086		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Copper, Total	0.01151		mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Iron, Total	0.656		mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Lead, Total	0.03003		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Magnesium, Total	35.8		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Manganese, Total	0.1382		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 13:28	EPA 7470A	1,7470A	MG
Nickel, Total	0.00364		mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Potassium, Total	13.2		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Selenium, Total	0.00888		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Sodium, Total	39.8		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00316	J	mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
Zinc, Total	0.05297		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 12:28	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/18/19 12:28	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02
 Client ID: RMW07_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00215	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00125		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1205		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	0.00017	J	mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Calcium, Dissolved	141.		mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00042	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00048	J	mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00422		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0484	J	mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00206		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	34.7		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.1232		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:59	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00241		mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Potassium, Dissolved	12.6		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00808		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Sodium, Dissolved	39.0		mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.00224	J	mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.03694		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:50	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.192		mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Antimony, Total	0.00071	J	mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01185		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Barium, Total	0.1033		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Calcium, Total	162.		mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Chromium, Total	0.00083	J	mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00097		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Copper, Total	0.00082	J	mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Iron, Total	32.0		mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Lead, Total	0.00653		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Magnesium, Total	43.1		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Manganese, Total	2.410		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 13:30	EPA 7470A	1,7470A	MG
Nickel, Total	0.00123	J	mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Potassium, Total	14.8		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Sodium, Total	77.9		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 13:20	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/18/19 13:20	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03
 Client ID: RMW09_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 15:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00474	J	mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00085	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.01152		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1024		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Calcium, Dissolved	161.		mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00042	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00060		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Iron, Dissolved	31.8		mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00266		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	42.8		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Manganese, Dissolved	2.390		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 18:00	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00083	J	mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Potassium, Dissolved	14.4		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Sodium, Dissolved	79.8		mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:55	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00390	J	mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Barium, Total	0.00092		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Calcium, Total	0.0405	J	mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Chromium, Total	0.00068	J	mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Iron, Total	0.0220	J	mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Manganese, Total	0.00185		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 13:31	EPA 7470A	1,7470A	MG
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 12:59	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/18/19 12:59	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902070-04
 Client ID: GWFB02_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 12:45
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00047	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.00062		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Calcium, Dissolved	0.0811	J	mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00018	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0315	J	mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 18:02	EPA 7470A	1,7470A	MG
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:26	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198536-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Antimony, Dissolved	0.00054	J	mg/l	0.00400	0.00042	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Chromium, Dissolved	0.00037	J	mg/l	0.00100	0.00017	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Iron, Dissolved	0.0411	J	mg/l	0.0500	0.0191	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Sodium, Dissolved	0.0323	J	mg/l	0.100	0.0293	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Thallium, Dissolved	0.00015	J	mg/l	0.00050	0.00014	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/17/19 12:57	01/18/19 09:22	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198546-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/17/19 12:49	01/21/19 12:56	1,7470A	MG



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198566-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Antimony, Total	0.00052	J	mg/l	0.00400	0.00042	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Iron, Total	0.0360	J	mg/l	0.0500	0.0191	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/17/19 14:36	01/18/19 11:59	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1198576-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/17/19 14:26	01/21/19 17:38	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198536-2								
Aluminum, Dissolved	100		-		80-120	-		
Antimony, Dissolved	84		-		80-120	-		
Arsenic, Dissolved	102		-		80-120	-		
Barium, Dissolved	97		-		80-120	-		
Beryllium, Dissolved	107		-		80-120	-		
Cadmium, Dissolved	104		-		80-120	-		
Calcium, Dissolved	100		-		80-120	-		
Chromium, Dissolved	94		-		80-120	-		
Cobalt, Dissolved	98		-		80-120	-		
Copper, Dissolved	94		-		80-120	-		
Iron, Dissolved	103		-		80-120	-		
Lead, Dissolved	91		-		80-120	-		
Magnesium, Dissolved	104		-		80-120	-		
Manganese, Dissolved	96		-		80-120	-		
Nickel, Dissolved	95		-		80-120	-		
Potassium, Dissolved	100		-		80-120	-		
Selenium, Dissolved	104		-		80-120	-		
Silver, Dissolved	100		-		80-120	-		
Sodium, Dissolved	102		-		80-120	-		
Thallium, Dissolved	92		-		80-120	-		
Vanadium, Dissolved	99		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198536-2					
Zinc, Dissolved	104	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198546-2					
Mercury, Total	114	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198566-2					
Aluminum, Total	100	-	80-120	-	
Antimony, Total	92	-	80-120	-	
Arsenic, Total	104	-	80-120	-	
Barium, Total	102	-	80-120	-	
Beryllium, Total	107	-	80-120	-	
Cadmium, Total	108	-	80-120	-	
Calcium, Total	100	-	80-120	-	
Chromium, Total	100	-	80-120	-	
Cobalt, Total	102	-	80-120	-	
Copper, Total	101	-	80-120	-	
Iron, Total	116	-	80-120	-	
Lead, Total	96	-	80-120	-	
Magnesium, Total	107	-	80-120	-	
Manganese, Total	100	-	80-120	-	
Nickel, Total	99	-	80-120	-	
Potassium, Total	102	-	80-120	-	
Selenium, Total	108	-	80-120	-	
Silver, Total	102	-	80-120	-	
Sodium, Total	104	-	80-120	-	
Thallium, Total	98	-	80-120	-	
Vanadium, Total	101	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198566-2					
Zinc, Total	108	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1198576-2					
Mercury, Dissolved	109	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198536-3 QC Sample: L1902070-01 Client ID: RMW01_011619												
Aluminum, Dissolved	0.00439J	2	1.99	100		-	-		75-125	-		20
Antimony, Dissolved	0.00100J	0.5	0.5031	101		-	-		75-125	-		20
Arsenic, Dissolved	0.00035J	0.12	0.1238	103		-	-		75-125	-		20
Barium, Dissolved	0.3570	2	2.341	99		-	-		75-125	-		20
Beryllium, Dissolved	ND	0.05	0.05226	104		-	-		75-125	-		20
Cadmium, Dissolved	ND	0.051	0.05075	100		-	-		75-125	-		20
Calcium, Dissolved	457.	10	481	240	Q	-	-		75-125	-		20
Chromium, Dissolved	0.00031J	0.2	0.1932	97		-	-		75-125	-		20
Cobalt, Dissolved	ND	0.5	0.4764	95		-	-		75-125	-		20
Copper, Dissolved	ND	0.25	0.2351	94		-	-		75-125	-		20
Iron, Dissolved	1.04	1	2.10	106		-	-		75-125	-		20
Lead, Dissolved	ND	0.51	0.4975	98		-	-		75-125	-		20
Magnesium, Dissolved	60.4	10	73.8	134	Q	-	-		75-125	-		20
Manganese, Dissolved	0.5404	0.5	1.032	98		-	-		75-125	-		20
Nickel, Dissolved	0.00131J	0.5	0.4744	95		-	-		75-125	-		20
Potassium, Dissolved	24.5	10	35.0	105		-	-		75-125	-		20
Selenium, Dissolved	ND	0.12	0.0421J	35	Q	-	-		75-125	-		20
Silver, Dissolved	ND	0.05	0.04810	96		-	-		75-125	-		20
Sodium, Dissolved	517.	10	544	270	Q	-	-		75-125	-		20
Thallium, Dissolved	ND	0.12	0.1172	98		-	-		75-125	-		20
Vanadium, Dissolved	ND	0.5	0.4981	100		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198536-3 QC Sample: L1902070-01 Client ID: RMW01_011619									
Zinc, Dissolved	ND	0.5	0.4699	94	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198546-3 WG1198546-4 QC Sample: L1901909-01 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00455	91	0.00458	92	75-125	1	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198566-3 QC Sample: L1901815-01 Client ID: MS Sample									
Aluminum, Total	0.027	2	2.08	103	-	-	75-125	-	20
Antimony, Total	0.0008J	0.5	0.5507	110	-	-	75-125	-	20
Arsenic, Total	0.01448	0.12	0.1400	105	-	-	75-125	-	20
Barium, Total	0.8693	2	2.806	97	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05195	104	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.05052	99	-	-	75-125	-	20
Calcium, Total	146	10	154	80	-	-	75-125	-	20
Chromium, Total	0.00181	0.2	0.1996	99	-	-	75-125	-	20
Cobalt, Total	0.0038	0.5	0.4971	99	-	-	75-125	-	20
Copper, Total	0.00097J	0.25	0.2464	98	-	-	75-125	-	20
Iron, Total	13.8	1	15.1	130	Q	-	75-125	-	20
Lead, Total	ND	0.51	0.5057	99	-	-	75-125	-	20
Magnesium, Total	158	10	178	200	Q	-	75-125	-	20
Manganese, Total	1.721	0.5	2.218	99	-	-	75-125	-	20
Nickel, Total	0.00352	0.5	0.4884	97	-	-	75-125	-	20
Potassium, Total	84.5	10	93.1	86	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.124	103	-	-	75-125	-	20
Silver, Total	ND	0.05	0.05051	101	-	-	75-125	-	20
Sodium, Total	163	10	176	130	Q	-	75-125	-	20
Thallium, Total	ND	0.12	0.1210	101	-	-	75-125	-	20
Vanadium, Total	0.0017J	0.5	0.5100	102	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198566-3 QC Sample: L1901815-01 Client ID: MS Sample									
Zinc, Total	0.0044J	0.5	0.5042	101	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198576-3 WG1198576-4 QC Sample: L1901865-02 Client ID: MS Sample									
Mercury, Dissolved	ND	0.005	0.00416	83	0.00279	56	Q 75-125	39	Q 20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198536-4 QC Sample: L1902070-01 Client ID: RMW01_011619						
Aluminum, Dissolved	0.00439J	0.00497J	mg/l	NC		20
Antimony, Dissolved	0.00100J	0.00265J	mg/l	NC		20
Arsenic, Dissolved	0.00035J	0.00043J	mg/l	NC		20
Barium, Dissolved	0.3570	0.3697	mg/l	3		20
Beryllium, Dissolved	ND	ND	mg/l	NC		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Calcium, Dissolved	457.	489	mg/l	7		20
Chromium, Dissolved	0.00031J	0.00032J	mg/l	NC		20
Cobalt, Dissolved	ND	ND	mg/l	NC		20
Copper, Dissolved	ND	ND	mg/l	NC		20
Iron, Dissolved	1.04	1.16	mg/l	11		20
Lead, Dissolved	ND	ND	mg/l	NC		20
Magnesium, Dissolved	60.4	63.6	mg/l	5		20
Manganese, Dissolved	0.5404	0.5704	mg/l	5		20
Nickel, Dissolved	0.00131J	0.00183J	mg/l	NC		20
Potassium, Dissolved	24.5	26.2	mg/l	7		20
Selenium, Dissolved	ND	ND	mg/l	NC		20
Silver, Dissolved	ND	ND	mg/l	NC		20
Sodium, Dissolved	517.	543	mg/l	5		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198536-4 QC Sample: L1902070-01 Client ID: RMW01_011619					
Thallium, Dissolved	ND	0.00018J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1198566-4 QC Sample: L1901815-01 Client ID: DUP Sample					
Arsenic, Total	0.01448	0.01557	mg/l	7	20
Barium, Total	0.8693	0.9003	mg/l	4	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Chromium, Total	0.00181	0.00158	mg/l	14	20
Copper, Total	0.00097J	0.00103	mg/l	NC	20
Lead, Total	ND	ND	mg/l	NC	20
Nickel, Total	0.00352	0.00271	mg/l	26	Q 20
Silver, Total	ND	0.00032J	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-01
 Client ID: RMW01_011619
 Sample Location: BRONX, NY

Date Collected: 01/16/19 10:00
 Date Received: 01/16/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.016		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:56	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:37	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-02

Date Collected: 01/16/19 12:00

Client ID: RMW07_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.002	J	mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:57	1,9010C/9012B	LH
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:39	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-03

Date Collected: 01/16/19 15:00

Client ID: RMW09_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.009		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:58	1,9010C/9012B	LH
Chromium, Hexavalent	0.003	J	mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:39	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902070-04

Date Collected: 01/16/19 12:45

Client ID: GWFB02_011619

Date Received: 01/16/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:59	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:40	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902070

Project Number: 170487003

Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1198387-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/17/19 04:15	01/17/19 04:36	1,7196A	GD
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1198578-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/17/19 16:50	01/18/19 12:29	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1198387-2								
Chromium, Hexavalent	97		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1198578-2 WG1198578-3								
Cyanide, Total	91		98		85-115	7		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198387-4 QC Sample: L1902070-01 Client ID: RMW01_011619												
Chromium, Hexavalent	ND	0.1	0.100	100	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198578-4 WG1198578-5 QC Sample: L1901865-02 Client ID: MS Sample												
Cyanide, Total	0.037	0.2	0.225	94	0.227	0.227	95	1	80-120	1	1	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Lab Number: L1902070

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198387-3 QC Sample: L1902070-01 Client ID: RMW01_011619						
Chromium, Hexavalent	ND	ND	mg/l	NC		20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902070**Project Number:** 170487003**Report Date:** 01/25/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-01A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-01B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-01C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-01D	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902070-01E	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902070-01F	Plastic 500ml unpreserved	A	7	7	2.6	Y	Absent		HEXCR-7196(1)
L1902070-01G	Plastic 250ml NaOH preserved	A	>12	>12	2.6	Y	Absent		TCN-9010(14)
L1902070-01H	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8082-LVI(7)
L1902070-01I	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8082-LVI(7)
L1902070-01J	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1902070-01K	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1902070-01L	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-01M	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Serial_No:01251915:23
Lab Number: L1902070
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-01N	Amber 1000ml unpreserved	A	7	7	2.6	Y	Absent		HERB-APA(7)
L1902070-01O	Amber 1000ml unpreserved	A	7	7	2.6	Y	Absent		HERB-APA(7)
L1902070-02A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-02B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-02C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-02D	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902070-02E	Plastic 250ml HNO3 preserved	A	<2	<2	2.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902070-02F	Plastic 500ml unpreserved	A	7	7	2.6	Y	Absent		HEXCR-7196(1)
L1902070-02G	Plastic 250ml NaOH preserved	A	>12	>12	2.6	Y	Absent		TCN-9010(14)
L1902070-02H	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8082-LVI(7)
L1902070-02I	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8082-LVI(7)
L1902070-02J	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1902070-02K	Amber 120ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1902070-02L	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-02M	Amber 250ml unpreserved	A	7	7	2.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-02N	Amber 1000ml unpreserved	A	7	7	2.6	Y	Absent		HERB-APA(7)
L1902070-02O	Amber 1000ml unpreserved	A	7	7	2.6	Y	Absent		HERB-APA(7)
L1902070-02P	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-02Q	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-02R	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Serial_No:01251915:23
Lab Number: L1902070
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-02S	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)
L1902070-03A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-03B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-03C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-03D	Plastic 250ml HNO3 preserved	C	<2	<2	3.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902070-03E	Plastic 250ml HNO3 preserved	C	<2	<2	3.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902070-03F	Plastic 500ml unpreserved	C	7	7	3.3	Y	Absent		HEXCR-7196(1)
L1902070-03G	Plastic 250ml NaOH preserved	C	>12	>12	3.3	Y	Absent		TCN-9010(14)
L1902070-03H	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(7)
L1902070-03I	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(7)
L1902070-03J	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L1902070-03K	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L1902070-03L	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-03M	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-03N	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L1902070-03O	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L1902070-03P	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-03Q	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-03R	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)
L1902070-03S	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Serial_No:01251915:23
Lab Number: L1902070
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-04A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-04B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-04C	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)
L1902070-04D	Plastic 250ml HNO3 preserved	C	<2	<2	3.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902070-04E	Plastic 250ml HNO3 preserved	C	<2	<2	3.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902070-04F	Plastic 500ml unpreserved	C	7	7	3.3	Y	Absent		HEXCR-7196(1)
L1902070-04G	Plastic 250ml NaOH preserved	C	>12	>12	3.3	Y	Absent		TCN-9010(14)
L1902070-04H	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(7)
L1902070-04I	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8082-LVI(7)
L1902070-04J	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L1902070-04K	Amber 120ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8081(7)
L1902070-04L	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-04M	Amber 250ml unpreserved	C	7	7	3.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1902070-04N	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L1902070-04O	Amber 1000ml unpreserved	C	7	7	3.3	Y	Absent		HERB-APA(7)
L1902070-04P	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-04Q	Plastic 250ml unpreserved	B	NA		4.7	Y	Absent		A2-NY-537-ISOTOPE(14)
L1902070-04R	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)
L1902070-04S	Amber 500ml unpreserved	B	B	B	4.7	Y	Absent		A2-14-DIOXANESIM-PPB(7)
L1902070-05A	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487003

Serial_No:01251915:23

Lab Number: L1902070

Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902070-05B	Vial HCl preserved	A	NA		2.6	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487003

Lab Number: L1902070
Report Date: 01/25/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #											
		1 of 1	1/16/19	L1902070											
Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information Project Name: <u>Gerard Ave + E. 146th St</u> Project Location: <u>Bronx NY</u> Project # <u>170487003</u> (Use Project name as Project #) <input checked="" type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #										
Client Information Client: <u>Langin Engineering</u> Address: <u>21 Penn Plaza</u> <u>8th Fl, NY NY 10001-2727</u> Phone: <u>212-479-5400</u> Fax: <u>212-479-5444</u> Email: <u>jleung@kngin.com</u>	Project Manager: <u>Julia Leung</u> ALPHAQuote #: <u>7013</u> Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:										
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: <u>Please also cc: datamanagement@kngin.com and vzluaga@kngin.com</u> Please specify Metals or TAL.			ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)	Total Bottles									
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials		Part 315/TCL VOC	Part 315/TCL SVOCs	Part 315/TCL PCBs	Pesticides / Herbicides	TAL Metals (total + residual)	Hex Chromium	total cyanide	PFOS + 1,4-Dioxane	Sample Specific Comments
		Date	Time												
<u>02070-01</u>	<u>RMW01_011619</u>	<u>1/16/19</u>	<u>1000</u>	<u>GW</u>	<u>JL</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>dissolved metals</u>
<u>02</u>	<u>RMW07_011619</u>	<u>↓</u>	<u>1200</u>	<u>↓</u>	<u>JL</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>filtered in</u>
<u>03</u>	<u>RMW09_011619</u>	<u>↓</u>	<u>1500</u>	<u>↓</u>	<u>JL</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>field</u>
<u>04</u>	<u>GWFB02_011619</u>	<u>↓</u>	<u>1245</u>	<u>AQ</u>	<u>JL</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
<u>05</u>	<u>GWTB03_011619</u>	<u>-</u>	<u>-</u>	<u>AQ</u>	<u>JL</u>		<u>X</u>								
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)					
		Relinquished By: <u>JL</u>		Date/Time: <u>1/16/19 - 4:20pm</u>		Received By: <u>JL</u>		Date/Time: <u>1/16/19 1600</u>							
		Relinquished By: <u>D. Santos AAL</u>		Date/Time: <u>1/16/19 1841</u>		Received By: <u>D. Santos AAL</u>		Date/Time: <u>1/16/19 1900</u>							
		Relinquished By: <u>D. Santos AAL</u>		Date/Time: <u>1/16/19</u>		Received By: <u>D. Santos AAL</u>		Date/Time: <u>1/16/19 2300</u>							



ANALYTICAL REPORT

Lab Number:	L1902340
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/25/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1902340-01	RMW10_011719	WATER	BRONX, NY	01/17/19 15:35	01/17/19
L1902340-02	RMW11_011719	WATER	BRONX, NY	01/17/19 13:45	01/17/19
L1902340-03	RMW14_011719	WATER	BRONX, NY	01/17/19 12:00	01/17/19
L1902340-04	RMW16_011719	WATER	BRONX, NY	01/17/19 13:15	01/17/19
L1902340-05	RMW17_011719	WATER	BRONX, NY	01/17/19 09:40	01/17/19
L1902340-06	GWTB04_011719	WATER	BRONX, NY	01/17/19 00:00	01/17/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

L1902340-02 and -03: The sample was received above the appropriate pH for the Dissolved Metals analysis.

The laboratory added HNO₃ to a pH <2.

L1902340-04: The collection date and time on the chain of custody was 17-JAN-19 13:15; however, the collection date/time on the container label was 17-JAN-19 13:10. At the client's request, the collection date/time is reported as 17-JAN-19 13:15.

Volatile Organics

L1902340-01, -02 and -03: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 01/25/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01 D
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 17:04
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	ND		ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
1,3-Dichloropropene, Total	ND		ug/l	1.0	0.29	2
1,1-Dichloropropene	ND		ug/l	5.0	1.4	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	71		ug/l	1.0	0.32	2
Toluene	2.3	J	ug/l	5.0	1.4	2
Ethylbenzene	2.0	J	ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	ND		ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-01 D

Date Collected: 01/17/19 15:35

Client ID: RMW10_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,3-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	4.4	J	ug/l	5.0	1.4	2
o-Xylene	3.0	J	ug/l	5.0	1.4	2
Xylenes, Total	7.4	J	ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
1,2-Dichloroethene, Total	ND		ug/l	5.0	1.4	2
Dibromomethane	ND		ug/l	10	2.0	2
1,2,3-Trichloropropane	ND		ug/l	5.0	1.4	2
Acrylonitrile	ND		ug/l	10	3.0	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	3.5	J	ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		ug/l	10	3.9	2
Vinyl acetate	ND		ug/l	10	2.0	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
2,2-Dichloropropane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,3-Dichloropropane	ND		ug/l	5.0	1.4	2
1,1,1,2-Tetrachloroethane	ND		ug/l	5.0	1.4	2
Bromobenzene	ND		ug/l	5.0	1.4	2
n-Butylbenzene	9.4		ug/l	5.0	1.4	2
sec-Butylbenzene	13		ug/l	5.0	1.4	2
tert-Butylbenzene	1.6	J	ug/l	5.0	1.4	2
o-Chlorotoluene	ND		ug/l	5.0	1.4	2
p-Chlorotoluene	ND		ug/l	5.0	1.4	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Hexachlorobutadiene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	72		ug/l	5.0	1.4	2
p-Isopropyltoluene	ND		ug/l	5.0	1.4	2
Naphthalene	ND		ug/l	5.0	1.4	2

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01 D
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	100		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	ND		ug/l	5.0	1.4	2
1,4-Dioxane	ND		ug/l	500	120	2
p-Diethylbenzene	21		ug/l	4.0	1.4	2
p-Ethyltoluene	ND		ug/l	4.0	1.4	2
1,2,4,5-Tetramethylbenzene	110		ug/l	4.0	1.1	2
Ethyl ether	ND		ug/l	5.0	1.4	2
trans-1,4-Dichloro-2-butene	ND		ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	91		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02 D
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 17:25
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
1,3-Dichloropropene, Total	ND		ug/l	5.0	1.4	10
1,1-Dichloropropene	ND		ug/l	25	7.0	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	120		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02 D

Date Collected: 01/17/19 13:45

Client ID: RMW11_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10
1,3-Dichlorobenzene	ND		ug/l	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
Xylenes, Total	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	ND		ug/l	25	7.0	10
1,2-Dichloroethene, Total	ND		ug/l	25	7.0	10
Dibromomethane	ND		ug/l	50	10.	10
1,2,3-Trichloropropane	ND		ug/l	25	7.0	10
Acrylonitrile	77		ug/l	50	15.	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	34	J	ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
Vinyl acetate	ND		ug/l	50	10.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
2,2-Dichloropropane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,3-Dichloropropane	ND		ug/l	25	7.0	10
1,1,1,2-Tetrachloroethane	ND		ug/l	25	7.0	10
Bromobenzene	ND		ug/l	25	7.0	10
n-Butylbenzene	18	J	ug/l	25	7.0	10
sec-Butylbenzene	12	J	ug/l	25	7.0	10
tert-Butylbenzene	ND		ug/l	25	7.0	10
o-Chlorotoluene	ND		ug/l	25	7.0	10
p-Chlorotoluene	ND		ug/l	25	7.0	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Hexachlorobutadiene	ND		ug/l	25	7.0	10
Isopropylbenzene	140		ug/l	25	7.0	10
p-Isopropyltoluene	ND		ug/l	25	7.0	10
Naphthalene	360		ug/l	25	7.0	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02 D
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	260		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
1,3,5-Trimethylbenzene	ND		ug/l	25	7.0	10
1,2,4-Trimethylbenzene	13	J	ug/l	25	7.0	10
1,4-Dioxane	ND		ug/l	2500	610	10
p-Diethylbenzene	47		ug/l	20	7.0	10
p-Ethyltoluene	18	J	ug/l	20	7.0	10
1,2,4,5-Tetramethylbenzene	95		ug/l	20	5.4	10
Ethyl ether	ND		ug/l	25	7.0	10
trans-1,4-Dichloro-2-butene	ND		ug/l	25	7.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	91		70-130

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03 D

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 01/22/19 17:47

Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	50	14.	20
1,1-Dichloroethane	ND		ug/l	50	14.	20
Chloroform	ND		ug/l	50	14.	20
Carbon tetrachloride	ND		ug/l	10	2.7	20
1,2-Dichloropropane	ND		ug/l	20	2.7	20
Dibromochloromethane	ND		ug/l	10	3.0	20
1,1,2-Trichloroethane	ND		ug/l	30	10.	20
Tetrachloroethene	ND		ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	ND		ug/l	10	2.6	20
1,1,1-Trichloroethane	ND		ug/l	50	14.	20
Bromodichloromethane	ND		ug/l	10	3.8	20
trans-1,3-Dichloropropene	ND		ug/l	10	3.3	20
cis-1,3-Dichloropropene	ND		ug/l	10	2.9	20
1,3-Dichloropropene, Total	ND		ug/l	10	2.9	20
1,1-Dichloropropene	ND		ug/l	50	14.	20
Bromoform	ND		ug/l	40	13.	20
1,1,1,2-Tetrachloroethane	ND		ug/l	10	3.3	20
Benzene	20		ug/l	10	3.2	20
Toluene	ND		ug/l	50	14.	20
Ethylbenzene	200		ug/l	50	14.	20
Chloromethane	ND		ug/l	50	14.	20
Bromomethane	ND		ug/l	50	14.	20
Vinyl chloride	ND		ug/l	20	1.4	20
Chloroethane	ND		ug/l	50	14.	20
1,1-Dichloroethene	ND		ug/l	10	3.4	20
trans-1,2-Dichloroethene	ND		ug/l	50	14.	20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03 D

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20
1,3-Dichlorobenzene	ND		ug/l	50	14.	20
1,4-Dichlorobenzene	ND		ug/l	50	14.	20
Methyl tert butyl ether	ND		ug/l	50	14.	20
p/m-Xylene	32	J	ug/l	50	14.	20
o-Xylene	ND		ug/l	50	14.	20
Xylenes, Total	32	J	ug/l	50	14.	20
cis-1,2-Dichloroethene	ND		ug/l	50	14.	20
1,2-Dichloroethene, Total	ND		ug/l	50	14.	20
Dibromomethane	ND		ug/l	100	20.	20
1,2,3-Trichloropropane	ND		ug/l	50	14.	20
Acrylonitrile	ND		ug/l	100	30.	20
Styrene	ND		ug/l	50	14.	20
Dichlorodifluoromethane	ND		ug/l	100	20.	20
Acetone	38	J	ug/l	100	29.	20
Carbon disulfide	ND		ug/l	100	20.	20
2-Butanone	ND		ug/l	100	39.	20
Vinyl acetate	ND		ug/l	100	20.	20
4-Methyl-2-pentanone	ND		ug/l	100	20.	20
2-Hexanone	ND		ug/l	100	20.	20
Bromochloromethane	ND		ug/l	50	14.	20
2,2-Dichloropropane	ND		ug/l	50	14.	20
1,2-Dibromoethane	ND		ug/l	40	13.	20
1,3-Dichloropropane	ND		ug/l	50	14.	20
1,1,1,2-Tetrachloroethane	ND		ug/l	50	14.	20
Bromobenzene	ND		ug/l	50	14.	20
n-Butylbenzene	40	J	ug/l	50	14.	20
sec-Butylbenzene	16	J	ug/l	50	14.	20
tert-Butylbenzene	ND		ug/l	50	14.	20
o-Chlorotoluene	ND		ug/l	50	14.	20
p-Chlorotoluene	ND		ug/l	50	14.	20
1,2-Dibromo-3-chloropropane	ND		ug/l	50	14.	20
Hexachlorobutadiene	ND		ug/l	50	14.	20
Isopropylbenzene	180		ug/l	50	14.	20
p-Isopropyltoluene	ND		ug/l	50	14.	20
Naphthalene	280		ug/l	50	14.	20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03 D
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	380		ug/l	50	14.	20
1,2,3-Trichlorobenzene	ND		ug/l	50	14.	20
1,2,4-Trichlorobenzene	ND		ug/l	50	14.	20
1,3,5-Trimethylbenzene	210		ug/l	50	14.	20
1,2,4-Trimethylbenzene	ND		ug/l	50	14.	20
1,4-Dioxane	ND		ug/l	5000	1200	20
p-Diethylbenzene	42		ug/l	40	14.	20
p-Ethyltoluene	30	J	ug/l	40	14.	20
1,2,4,5-Tetramethylbenzene	120		ug/l	40	11.	20
Ethyl ether	ND		ug/l	50	14.	20
trans-1,4-Dichloro-2-butene	ND		ug/l	50	14.	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 16:20
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	109		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 16:42
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	107		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-06
 Client ID: GWTB04_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 00:00
 Date Received: 01/17/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/22/19 15:58
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-06
 Client ID: GWTB04_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 00:00
 Date Received: 01/17/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.7	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-06
Client ID: GWTB04_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 00:00
Date Received: 01/17/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	107		70-130

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/22/19 10:51
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1199942-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/22/19 10:51
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1199942-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/22/19 10:51
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG1199942-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1199942-3 WG1199942-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	99		96		70-130	3		20
Chloroform	98		96		70-130	2		20
Carbon tetrachloride	83		78		63-132	6		20
1,2-Dichloropropane	100		90		70-130	11		20
Dibromochloromethane	99		100		63-130	1		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	93		87		70-130	7		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	85		81		62-150	5		20
1,2-Dichloroethane	90		88		70-130	2		20
1,1,1-Trichloroethane	84		83		67-130	1		20
Bromodichloromethane	94		95		67-130	1		20
trans-1,3-Dichloropropene	85		86		70-130	1		20
cis-1,3-Dichloropropene	88		88		70-130	0		20
1,1-Dichloropropene	86		86		70-130	0		20
Bromoform	100		100		54-136	0		20
1,1,1,2,2-Tetrachloroethane	100		97		67-130	3		20
Benzene	100		98		70-130	2		20
Toluene	100		100		70-130	0		20
Ethylbenzene	97		95		70-130	2		20
Chloromethane	99		94		64-130	5		20
Bromomethane	96		91		39-139	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1199942-3 WG1199942-4								
Vinyl chloride	100		98		55-140	2		20
Chloroethane	120		110		55-138	9		20
1,1-Dichloroethene	96		93		61-145	3		20
trans-1,2-Dichloroethene	99		99		70-130	0		20
Trichloroethene	97		92		70-130	5		20
1,2-Dichlorobenzene	100		99		70-130	1		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	82		81		63-130	1		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		98		70-130	2		20
Dibromomethane	94		96		70-130	2		20
1,2,3-Trichloropropane	99		98		64-130	1		20
Acrylonitrile	98		96		70-130	2		20
Styrene	105		100		70-130	5		20
Dichlorodifluoromethane	87		82		36-147	6		20
Acetone	79		76		58-148	4		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	82		79		63-138	4		20
Vinyl acetate	100		100		70-130	0		20
4-Methyl-2-pentanone	80		80		59-130	0		20
2-Hexanone	66		68		57-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1199942-3 WG1199942-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	73		69		63-133	6		20
1,2-Dibromoethane	97		98		70-130	1		20
1,3-Dichloropropane	98		100		70-130	2		20
1,1,1,2-Tetrachloroethane	98		97		64-130	1		20
Bromobenzene	100		91		70-130	9		20
n-Butylbenzene	92		88		53-136	4		20
sec-Butylbenzene	92		88		70-130	4		20
tert-Butylbenzene	79		75		70-130	5		20
o-Chlorotoluene	100		94		70-130	6		20
p-Chlorotoluene	99		94		70-130	5		20
1,2-Dibromo-3-chloropropane	79		80		41-144	1		20
Hexachlorobutadiene	86		80		63-130	7		20
Isopropylbenzene	92		83		70-130	10		20
p-Isopropyltoluene	90		86		70-130	5		20
Naphthalene	76		75		70-130	1		20
n-Propylbenzene	96		90		69-130	6		20
1,2,3-Trichlorobenzene	86		84		70-130	2		20
1,2,4-Trichlorobenzene	85		82		70-130	4		20
1,3,5-Trimethylbenzene	98		93		64-130	5		20
1,2,4-Trimethylbenzene	96		92		70-130	4		20
1,4-Dioxane	112		104		56-162	7		20
p-Diethylbenzene	79		82		70-130	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG1199942-3 WG1199942-4								
p-Ethyltoluene	96		91		70-130	5		20
1,2,4,5-Tetramethylbenzene	71		60	Q	70-130	17		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	80		82		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	86		87		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	89		87		70-130
Dibromofluoromethane	95		95		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 12:59
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	1.2	J	ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	57		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 13:20
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.1		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.61		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	4.1		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.05	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.04	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	0.06	J	ug/l	0.10	0.01	1
Acenaphthylene	0.06	J	ug/l	0.10	0.01	1
Anthracene	0.24		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	0.70		ug/l	0.10	0.01	1
Phenanthrene	0.88		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.49		ug/l	0.10	0.02	1
2-Methylnaphthalene	1.0		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	73		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 15:18
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	58		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 13:47
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.19		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.08	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	140	E	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	0.06	J	ug/l	0.10	0.01	1
Anthracene	0.04	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.23		ug/l	0.10	0.01	1
Phenanthrene	0.25		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	0.10		ug/l	0.10	0.02	1
2-Methylnaphthalene	54		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02

Date Collected: 01/17/19 13:45

Client ID: RMW11_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	73		41-149

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02 D

Date Collected: 01/17/19 13:45

Client ID: RMW11_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM

Extraction Date: 01/19/19 08:58

Analytical Date: 01/24/19 21:05

Analyst: CB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	220		ug/l	1.0	0.49	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 15:47
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	1.7	J	ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	50		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 14:39
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.41		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	1.0		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	120	E	ug/l	0.10	0.05	1
Benzo(a)anthracene	0.28		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.28		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.33		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.13		ug/l	0.10	0.01	1
Chrysene	0.28		ug/l	0.10	0.01	1
Acenaphthylene	0.10	J	ug/l	0.10	0.01	1
Anthracene	0.32		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.20		ug/l	0.10	0.01	1
Fluorene	0.55		ug/l	0.10	0.01	1
Phenanthrene	1.4		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.03	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.20		ug/l	0.10	0.01	1
Pyrene	0.97		ug/l	0.10	0.02	1
2-Methylnaphthalene	65		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	72		10-120
4-Terphenyl-d14	63		41-149

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03 D

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM

Extraction Date: 01/19/19 08:58

Analytical Date: 01/24/19 21:28

Analyst: CB

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	210		ug/l	1.0	0.49	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 16:15
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	52		15-120
2,4,6-Tribromophenol	53		10-120
4-Terphenyl-d14	44		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 15:05
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.11		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.22		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.06	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.07	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Chrysene	0.06	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	0.02	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.05	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.08	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.04	J	ug/l	0.10	0.01	1
Pyrene	0.12		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.04	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-04

Date Collected: 01/17/19 13:15

Client ID: RMW16_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	57		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/21/19 16:43
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	1.8	J	ug/l	5.0	0.57	1
2-Methylphenol	1.8	J	ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	1.3	J	ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	59		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/22/19 15:32
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.22		ug/l	0.10	0.01	1
2-Chloronaphthalene	0.07	J	ug/l	0.20	0.02	1
Fluoranthene	0.37		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.42		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.17		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.14		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.14		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Chrysene	0.18		ug/l	0.10	0.01	1
Acenaphthylene	0.18		ug/l	0.10	0.01	1
Anthracene	0.16		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.07	J	ug/l	0.10	0.01	1
Fluorene	0.14		ug/l	0.10	0.01	1
Phenanthrene	0.68		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.02	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.06	J	ug/l	0.10	0.01	1
Pyrene	0.52		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.17		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-05

Date Collected: 01/17/19 09:40

Client ID: RMW17_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	74		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/21/19 11:35
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1199171-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/21/19 11:35
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1199171-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/21/19 11:35
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1199171-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	45		10-120
4-Terphenyl-d14	57		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/22/19 11:35
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1199172-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/22/19 11:35
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 01/19/19 08:58

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-05 Batch: WG1199172-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	31		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	41		10-120
4-Terphenyl-d14	74		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1199171-2 WG1199171-3								
Acenaphthene	81		82		37-111	1		30
1,2,4-Trichlorobenzene	80		78		39-98	3		30
Hexachlorobenzene	88		93		40-140	6		30
Bis(2-chloroethyl)ether	77		76		40-140	1		30
2-Chloronaphthalene	91		91		40-140	0		30
1,2-Dichlorobenzene	79		76		40-140	4		30
1,3-Dichlorobenzene	78		72		40-140	8		30
1,4-Dichlorobenzene	76		72		36-97	5		30
3,3'-Dichlorobenzidine	54		58		40-140	7		30
2,4-Dinitrotoluene	82		90		48-143	9		30
2,6-Dinitrotoluene	95		102		40-140	7		30
Fluoranthene	88		94		40-140	7		30
4-Chlorophenyl phenyl ether	85		91		40-140	7		30
4-Bromophenyl phenyl ether	89		97		40-140	9		30
Bis(2-chloroisopropyl)ether	76		75		40-140	1		30
Bis(2-chloroethoxy)methane	83		81		40-140	2		30
Hexachlorobutadiene	88		83		40-140	6		30
Hexachlorocyclopentadiene	91		85		40-140	7		30
Hexachloroethane	77		74		40-140	4		30
Isophorone	90		89		40-140	1		30
Naphthalene	83		82		40-140	1		30
Nitrobenzene	86		82		40-140	5		30
NDPA/DPA	88		94		40-140	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1199171-2 WG1199171-3								
n-Nitrosodi-n-propylamine	94		90		29-132	4		30
Bis(2-ethylhexyl)phthalate	101		101		40-140	0		30
Butyl benzyl phthalate	99		107		40-140	8		30
Di-n-butylphthalate	92		94		40-140	2		30
Di-n-octylphthalate	103		103		40-140	0		30
Diethyl phthalate	93		98		40-140	5		30
Dimethyl phthalate	101		103		40-140	2		30
Benzo(a)anthracene	100		104		40-140	4		30
Benzo(a)pyrene	96		102		40-140	6		30
Benzo(b)fluoranthene	99		98		40-140	1		30
Benzo(k)fluoranthene	100		105		40-140	5		30
Chrysene	93		97		40-140	4		30
Acenaphthylene	93		93		45-123	0		30
Anthracene	94		97		40-140	3		30
Benzo(ghi)perylene	92		103		40-140	11		30
Fluorene	86		87		40-140	1		30
Phenanthrene	90		92		40-140	2		30
Dibenzo(a,h)anthracene	94		103		40-140	9		30
Indeno(1,2,3-cd)pyrene	86		93		40-140	8		30
Pyrene	86		90		26-127	5		30
Biphenyl	86		86		40-140	0		30
4-Chloroaniline	95		94		40-140	1		30
2-Nitroaniline	94		98		52-143	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1199171-2 WG1199171-3								
3-Nitroaniline	60		63		25-145	5		30
4-Nitroaniline	73		84		51-143	14		30
Dibenzofuran	81		85		40-140	5		30
2-Methylnaphthalene	90		86		40-140	5		30
1,2,4,5-Tetrachlorobenzene	86		84		2-134	2		30
Acetophenone	85		83		39-129	2		30
2,4,6-Trichlorophenol	100		108		30-130	8		30
p-Chloro-m-cresol	101	Q	108	Q	23-97	7		30
2-Chlorophenol	85		84		27-123	1		30
2,4-Dichlorophenol	93		95		30-130	2		30
2,4-Dimethylphenol	98		99		30-130	1		30
2-Nitrophenol	90		90		30-130	0		30
4-Nitrophenol	84	Q	86	Q	10-80	2		30
2,4-Dinitrophenol	86		92		20-130	7		30
4,6-Dinitro-o-cresol	88		92		20-164	4		30
Pentachlorophenol	81		90		9-103	11		30
Phenol	68		65		12-110	5		30
2-Methylphenol	92		92		30-130	0		30
3-Methylphenol/4-Methylphenol	93		91		30-130	2		30
2,4,5-Trichlorophenol	99		104		30-130	5		30
Benzoic Acid	62		72		10-164	15		30
Benzyl Alcohol	89		87		26-116	2		30
Carbazole	95		100		55-144	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1199171-2 WG1199171-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	79		75		21-120
Phenol-d6	65		59		10-120
Nitrobenzene-d5	86		82		23-120
2-Fluorobiphenyl	89		89		15-120
2,4,6-Tribromophenol	96		103		10-120
4-Terphenyl-d14	76		82		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1199172-2 WG1199172-3								
Acenaphthene	62		57		40-140	8		40
2-Chloronaphthalene	76		71		40-140	7		40
Fluoranthene	76		76		40-140	0		40
Hexachlorobutadiene	70		64		40-140	9		40
Naphthalene	69		63		40-140	9		40
Benzo(a)anthracene	72		72		40-140	0		40
Benzo(a)pyrene	65		64		40-140	2		40
Benzo(b)fluoranthene	62		62		40-140	0		40
Benzo(k)fluoranthene	69		68		40-140	1		40
Chrysene	71		70		40-140	1		40
Acenaphthylene	79		74		40-140	7		40
Anthracene	72		69		40-140	4		40
Benzo(ghi)perylene	70		68		40-140	3		40
Fluorene	65		61		40-140	6		40
Phenanthrene	71		68		40-140	4		40
Dibenzo(a,h)anthracene	71		70		40-140	1		40
Indeno(1,2,3-cd)pyrene	84		83		40-140	1		40
Pyrene	76		76		40-140	0		40
2-Methylnaphthalene	76		71		40-140	7		40
Pentachlorophenol	55		58		40-140	5		40
Hexachlorobenzene	73		70		40-140	4		40
Hexachloroethane	58		54		40-140	7		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-05 Batch: WG1199172-2 WG1199172-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	44		39		21-120
Phenol-d6	36		33		10-120
Nitrobenzene-d5	70		65		23-120
2-Fluorobiphenyl	75		70		15-120
2,4,6-Tribromophenol	57		63		10-120
4-Terphenyl-d14	75		75		41-149

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
Client ID: RMW10_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/23/19 05:15
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 15:40
Cleanup Method: EPA 3665A
Cleanup Date: 01/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	93		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	104		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 01/23/19 07:59
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 15:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/22/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
Client ID: RMW14_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/23/19 08:12
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 15:40
Cleanup Method: EPA 3665A
Cleanup Date: 01/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	99		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 01/23/19 08:26
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 15:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/22/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	101		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
Client ID: RMW17_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 01/23/19 08:39
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 15:40
Cleanup Method: EPA 3665A
Cleanup Date: 01/22/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/22/19 01:20
 Analyst: AWS

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 15:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/21/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/21/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-05 Batch: WG1199538-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	85		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1199538-2 WG1199538-3									
Aroclor 1016	74		78		40-140	6		50	A
Aroclor 1260	71		77		40-140	8		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		89		30-150	A
Decachlorobiphenyl	78		88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		89		30-150	B
Decachlorobiphenyl	88		95		30-150	B



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Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/22/19 14:44
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-01

Date Collected: 01/17/19 15:35

Client ID: RMW10_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 17:04
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	75		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/22/19 14:56
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02

Date Collected: 01/17/19 13:45

Client ID: RMW11_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	41		30-150	B
Decachlorobiphenyl	46		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 17:23
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	76		30-150	A
DCAA	76		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
Client ID: RMW14_011719
Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
Date Received: 01/17/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 01/22/19 15:09
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		30-150	B
Decachlorobiphenyl	34		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 18:01
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	117		30-150	A
DCAA	91		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/22/19 15:22
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	0.005	J	ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	71		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 18:20
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	95		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/22/19 15:35
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	0.007	J	ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/21/19 18:39
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	84		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 01/21/19 16:08
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/19/19 07:37

Methylation Date: 01/19/19 18:48

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1199145-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	89		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/22/19 10:52
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1199589-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 01/22/19 10:52
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/21/19 18:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05 Batch: WG1199589-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	90		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1199145-2 WG1199145-3									
2,4-D	87		84		30-150	4		25	A
2,4,5-T	95		94		30-150	1		25	A
2,4,5-TP (Silvex)	86		85		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria	Column
DCAA	89		88		30-150	A
DCAA	83		98		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1199589-2 WG1199589-3									
Delta-BHC	83		87		30-150	5		20	A
Lindane	81		85		30-150	4		20	A
Alpha-BHC	85		90		30-150	5		20	A
Beta-BHC	91		97		30-150	6		20	A
Heptachlor	79		87		30-150	10		20	A
Aldrin	75		85		30-150	12		20	A
Heptachlor epoxide	91		95		30-150	5		20	A
Endrin	87		91		30-150	5		20	A
Endrin aldehyde	77		78		30-150	0		20	A
Endrin ketone	91		95		30-150	4		20	A
Dieldrin	91		96		30-150	5		20	A
4,4'-DDE	83		90		30-150	8		20	A
4,4'-DDD	85		91		30-150	7		20	A
4,4'-DDT	88		89		30-150	2		20	A
Endosulfan I	84		85		30-150	1		20	A
Endosulfan II	83		88		30-150	6		20	A
Endosulfan sulfate	86		89		30-150	3		20	A
Methoxychlor	96		99		30-150	4		20	A
cis-Chlordane	76		81		30-150	7		20	A
trans-Chlordane	75		82		30-150	9		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1199589-2 WG1199589-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	78		84		30-150	A
Decachlorobiphenyl	74		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		90		30-150	B
Decachlorobiphenyl	79		89		30-150	B



METALS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.162		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00171		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Barium, Total	0.1480		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Calcium, Total	121.		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Chromium, Total	0.00923		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00042	J	mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Copper, Total	0.00131		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Iron, Total	8.53		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Lead, Total	0.02811		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Magnesium, Total	26.4		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Manganese, Total	0.1990		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 16:53	EPA 7470A	1,7470A	MG
Nickel, Total	0.00463		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Potassium, Total	12.9		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Sodium, Total	47.1		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
Zinc, Total	0.00426	J	mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 14:54	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/22/19 14:54	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00361	J	mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00052	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00175		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1481		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Calcium, Dissolved	126.		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00046	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00025	J	mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Iron, Dissolved	8.00		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00049	J	mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	27.7		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.1942		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:24	EPA 7470A	1,7470A	MG
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Potassium, Dissolved	13.1		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Sodium, Dissolved	50.1		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:26	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.464		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00723		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Barium, Total	0.02871		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Calcium, Total	40.4		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Chromium, Total	0.00609		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00049	J	mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Copper, Total	0.00148		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Iron, Total	3.70		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Lead, Total	0.00269		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Magnesium, Total	6.22		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Manganese, Total	0.6418		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 16:54	EPA 7470A	1,7470A	MG
Nickel, Total	0.00374		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Potassium, Total	4.11		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Sodium, Total	26.9		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 14:58	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/22/19 14:58	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-02
 Client ID: RMW11_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:45
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00488	J	mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00055	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00746		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.02474		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Calcium, Dissolved	43.2		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00019	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00017	J	mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Iron, Dissolved	2.95		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	6.40		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.6393		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:29	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00083	J	mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Potassium, Dissolved	4.36		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Sodium, Dissolved	28.0		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:31	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.95		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Arsenic, Total	0.01701		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Barium, Total	0.05478		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Beryllium, Total	0.00014	J	mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Calcium, Total	120.		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Chromium, Total	0.02835		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00189		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Copper, Total	0.00668		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Iron, Total	14.1		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Lead, Total	0.02247		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Magnesium, Total	23.7		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Manganese, Total	1.003		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 16:56	EPA 7470A	1,7470A	MG
Nickel, Total	0.01411		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Potassium, Total	9.14		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Sodium, Total	67.0		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00563		mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
Zinc, Total	0.02173		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 15:02	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	0.024	J	mg/l	0.010	0.010	1		01/22/19 15:02	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03
 Client ID: RMW14_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 12:00
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0143		mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00047	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.01584		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.04556		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Calcium, Dissolved	124.		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00089	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00025	J	mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Iron, Dissolved	10.9		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00683		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	24.3		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.9499		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:31	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00102	J	mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Potassium, Dissolved	9.13		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Sodium, Dissolved	69.7		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:35	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.54		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Antimony, Total	0.00126	J	mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00244		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Barium, Total	0.1418		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Calcium, Total	267.		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Chromium, Total	0.01498		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00192		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Copper, Total	0.01261		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Iron, Total	4.10		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Lead, Total	0.05401		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Magnesium, Total	57.2		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Manganese, Total	0.3968		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Mercury, Total	0.00018	J	mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 17:01	EPA 7470A	1,7470A	MG
Nickel, Total	0.01051		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Potassium, Total	17.2		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Selenium, Total	0.00292	J	mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Sodium, Total	76.6		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00442	J	mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
Zinc, Total	0.02406		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 15:06	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/22/19 15:06	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-04
 Client ID: RMW16_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 13:15
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00139	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00114		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1260		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Calcium, Dissolved	263.		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00033	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00099		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00092	J	mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Iron, Dissolved	1.15		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00101		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	57.2		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.3540		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:32	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00239		mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Potassium, Dissolved	16.5		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Selenium, Dissolved	0.00219	J	mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Sodium, Dissolved	76.5		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01140		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:54	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

SAMPLE RESULTS

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.608		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00273		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Barium, Total	0.1084		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Calcium, Total	212.		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Chromium, Total	0.00711		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00101		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Copper, Total	0.00501		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Iron, Total	1.92		mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Lead, Total	0.01982		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Magnesium, Total	62.2		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Manganese, Total	0.2988		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 17:03	EPA 7470A	1,7470A	MG
Nickel, Total	0.00546		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Potassium, Total	19.8		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Sodium, Total	60.0		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00445	J	mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
Zinc, Total	0.01551		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 15:10	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/22/19 15:10	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-05
 Client ID: RMW17_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 09:40
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00370	J	mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00194		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.1037		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Calcium, Dissolved	202.		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00046	J	mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00048	J	mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.558		mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	60.9		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.2636		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:49	EPA 7470A	1,7470A	MG
Nickel, Dissolved	0.00254		mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Potassium, Dissolved	18.5		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Sodium, Dissolved	57.2		mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.00249	J	mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.00609	J	mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 10:58	EPA 3005A	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1198915-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Antimony, Dissolved	0.00059	J	mg/l	0.00400	0.00042	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Iron, Dissolved	0.0260	J	mg/l	0.0500	0.0191	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Sodium, Dissolved	0.0319	J	mg/l	0.100	0.0293	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	01/18/19 11:40	01/22/19 09:59	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1198950-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Antimony, Total	0.00048	J	mg/l	0.00400	0.00042	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Beryllium, Total	ND		mg/l	0.00050	0.00010	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Iron, Total	0.0250	J	mg/l	0.0500	0.0191	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	01/18/19 13:45	01/22/19 13:47	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1199010-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/18/19 12:24	01/21/19 16:14	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-05 Batch: WG1199430-1										
Mercury, Dissolved	0.00008	J	mg/l	0.00020	0.00006	1	01/21/19 11:01	01/21/19 23:20	1,7470A	MG



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1198915-2								
Aluminum, Dissolved	100		-		80-120	-		
Antimony, Dissolved	101		-		80-120	-		
Arsenic, Dissolved	104		-		80-120	-		
Barium, Dissolved	107		-		80-120	-		
Beryllium, Dissolved	109		-		80-120	-		
Cadmium, Dissolved	115		-		80-120	-		
Calcium, Dissolved	106		-		80-120	-		
Chromium, Dissolved	104		-		80-120	-		
Cobalt, Dissolved	106		-		80-120	-		
Copper, Dissolved	104		-		80-120	-		
Iron, Dissolved	116		-		80-120	-		
Lead, Dissolved	109		-		80-120	-		
Magnesium, Dissolved	110		-		80-120	-		
Manganese, Dissolved	101		-		80-120	-		
Nickel, Dissolved	107		-		80-120	-		
Potassium, Dissolved	106		-		80-120	-		
Selenium, Dissolved	106		-		80-120	-		
Silver, Dissolved	108		-		80-120	-		
Sodium, Dissolved	104		-		80-120	-		
Thallium, Dissolved	107		-		80-120	-		
Vanadium, Dissolved	104		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1198915-2					
Zinc, Dissolved	110	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1198950-2					
Aluminum, Total	104	-	80-120	-	
Antimony, Total	103	-	80-120	-	
Arsenic, Total	103	-	80-120	-	
Barium, Total	107	-	80-120	-	
Beryllium, Total	107	-	80-120	-	
Cadmium, Total	114	-	80-120	-	
Calcium, Total	101	-	80-120	-	
Chromium, Total	99	-	80-120	-	
Cobalt, Total	103	-	80-120	-	
Copper, Total	100	-	80-120	-	
Iron, Total	112	-	80-120	-	
Lead, Total	111	-	80-120	-	
Magnesium, Total	107	-	80-120	-	
Manganese, Total	100	-	80-120	-	
Nickel, Total	104	-	80-120	-	
Potassium, Total	101	-	80-120	-	
Selenium, Total	111	-	80-120	-	
Silver, Total	105	-	80-120	-	
Sodium, Total	104	-	80-120	-	
Thallium, Total	105	-	80-120	-	
Vanadium, Total	103	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1198950-2					
Zinc, Total	115	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1199010-2					
Mercury, Total	110	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 Batch: WG1199430-2					
Mercury, Dissolved	114	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198915-3 QC Sample: L1902346-01 Client ID: MS Sample												
Aluminum, Dissolved	0.009J	2	1.92	96	-	-	-	-	75-125	-	-	20
Antimony, Dissolved	0.0006J	0.5	0.5548	111	-	-	-	-	75-125	-	-	20
Arsenic, Dissolved	0.00054	0.12	0.1234	102	-	-	-	-	75-125	-	-	20
Barium, Dissolved	0.1596	2	2.181	101	-	-	-	-	75-125	-	-	20
Beryllium, Dissolved	ND	0.05	0.05312	106	-	-	-	-	75-125	-	-	20
Cadmium, Dissolved	ND	0.051	0.05473	107	-	-	-	-	75-125	-	-	20
Calcium, Dissolved	44.4	10	54.6	102	-	-	-	-	75-125	-	-	20
Chromium, Dissolved	0.00041J	0.2	0.1993	100	-	-	-	-	75-125	-	-	20
Cobalt, Dissolved	0.0004J	0.5	0.5116	102	-	-	-	-	75-125	-	-	20
Copper, Dissolved	ND	0.25	0.2522	101	-	-	-	-	75-125	-	-	20
Iron, Dissolved	31.0	1	32.2	120	-	-	-	-	75-125	-	-	20
Lead, Dissolved	ND	0.51	0.5227	102	-	-	-	-	75-125	-	-	20
Magnesium, Dissolved	12.9	10	23.6	107	-	-	-	-	75-125	-	-	20
Manganese, Dissolved	1.540	0.5	1.985	89	-	-	-	-	75-125	-	-	20
Nickel, Dissolved	ND	0.5	0.5174	103	-	-	-	-	75-125	-	-	20
Potassium, Dissolved	12.4	10	22.2	98	-	-	-	-	75-125	-	-	20
Selenium, Dissolved	ND	0.12	0.118	98	-	-	-	-	75-125	-	-	20
Silver, Dissolved	ND	0.05	0.05155	103	-	-	-	-	75-125	-	-	20
Sodium, Dissolved	62.8	10	70.8	80	-	-	-	-	75-125	-	-	20
Thallium, Dissolved	ND	0.12	0.1222	102	-	-	-	-	75-125	-	-	20
Vanadium, Dissolved	0.0018J	0.5	0.5128	102	-	-	-	-	75-125	-	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198915-3 QC Sample: L1902346-01 Client ID: MS Sample									
Zinc, Dissolved	ND	0.5	0.5250	105	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198950-3 QC Sample: L1902215-01 Client ID: MS Sample									
Aluminum, Total	ND	2	1.99	100	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.5783	116	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.1325	110	-	-	75-125	-	20
Barium, Total	0.0103	2	2.065	103	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05218	104	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.05296	104	-	-	75-125	-	20
Calcium, Total	842.	10	826	0	Q	-	75-125	-	20
Chromium, Total	ND	0.2	0.1919	96	-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.4832	97	-	-	75-125	-	20
Copper, Total	ND	0.25	0.2420	97	-	-	75-125	-	20
Iron, Total	0.714	1	1.77	106	-	-	75-125	-	20
Lead, Total	ND	0.51	0.5481	107	-	-	75-125	-	20
Magnesium, Total	388.	10	382	0	Q	-	75-125	-	20
Manganese, Total	0.7297	0.5	1.191	92	-	-	75-125	-	20
Nickel, Total	ND	0.5	0.4890	98	-	-	75-125	-	20
Potassium, Total	28.8	10	38.5	97	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.126	105	-	-	75-125	-	20
Silver, Total	ND	0.05	0.05009	100	-	-	75-125	-	20
Sodium, Total	2410	10	2360	0	Q	-	75-125	-	20
Thallium, Total	ND	0.12	0.1163	97	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.5274	105	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198950-3 QC Sample: L1902215-01 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.4786	96	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1199010-3 WG1199010-4 QC Sample: L1901984-05 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00477	96	0.00475	95	75-125	1	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1199430-3 QC Sample: L1902340-01 Client ID: RMW10_011719									
Mercury, Dissolved	ND	0.005	0.00454	91	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198915-4 QC Sample: L1902346-01 Client ID: DUP Sample						
Arsenic, Dissolved	0.00054	0.00058	mg/l	6		20
Barium, Dissolved	0.1596	0.1611	mg/l	1		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Chromium, Dissolved	0.00041J	0.00049J	mg/l	NC		20
Copper, Dissolved	ND	ND	mg/l	NC		20
Lead, Dissolved	ND	ND	mg/l	NC		20
Manganese, Dissolved	1.540	1.555	mg/l	1		20
Selenium, Dissolved	ND	ND	mg/l	NC		20
Silver, Dissolved	ND	ND	mg/l	NC		20
Zinc, Dissolved	ND	ND	mg/l	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1198950-4 QC Sample: L1902215-01 Client ID: DUP Sample					
Aluminum, Total	ND	ND	mg/l	NC	20
Arsenic, Total	ND	ND	mg/l	NC	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	842.	839	mg/l	0	20
Chromium, Total	ND	ND	mg/l	NC	20
Cobalt, Total	ND	ND	mg/l	NC	20
Copper, Total	ND	0.01642	mg/l	NC	20
Iron, Total	0.714	0.697	mg/l	2	20
Lead, Total	ND	ND	mg/l	NC	20
Magnesium, Total	388.	386	mg/l	1	20
Manganese, Total	0.7297	0.7428	mg/l	2	20
Nickel, Total	ND	ND	mg/l	NC	20
Potassium, Total	28.8	28.8	mg/l	0	20
Sodium, Total	2410	2400	mg/l	0	20
Zinc, Total	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-05 QC Batch ID: WG1199430-4 QC Sample: L1902340-01 Client ID: RMW10_011719					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-01
 Client ID: RMW10_011719
 Sample Location: BRONX, NY

Date Collected: 01/17/19 15:35
 Date Received: 01/17/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.006		mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 14:15	1,9010C/9012B	LH
Chromium, Hexavalent	0.006	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:11	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-02

Date Collected: 01/17/19 13:45

Client ID: RMW11_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 13:29	1,9010C/9012B	LH
Chromium, Hexavalent	0.004	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:11	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-03

Date Collected: 01/17/19 12:00

Client ID: RMW14_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.004	J	mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 13:30	1,9010C/9012B	LH
Chromium, Hexavalent	0.004	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:13	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-04

Date Collected: 01/17/19 13:15

Client ID: RMW16_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.009		mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 14:16	1,9010C/9012B	LH
Chromium, Hexavalent	0.008	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:13	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**SAMPLE RESULTS**

Lab ID: L1902340-05

Date Collected: 01/17/19 09:40

Client ID: RMW17_011719

Date Received: 01/17/19

Sample Location: BRONX, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	0.003	J	mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 13:32	1,9010C/9012B	LH
Chromium, Hexavalent	0.005	J	mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:14	1,7196A	GD



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1198765-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/18/19 04:40	01/18/19 05:10	1,7196A	GD
General Chemistry - Westborough Lab for sample(s): 01-05 Batch: WG1199045-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/18/19 17:40	01/21/19 13:01	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1198765-2								
Chromium, Hexavalent	103		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 Batch: WG1199045-2 WG1199045-3								
Cyanide, Total	100		95		85-115	5		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198765-4 QC Sample: L1902340-01 Client ID: RMW10_011719												
Chromium, Hexavalent	0.006J	0.1	0.101	101	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1199045-4 WG1199045-5 QC Sample: L1902340-01 Client ID: RMW10_011719												
Cyanide, Total	0.006	0.2	0.195	94	0.189	0.189	91	91	80-120	3	3	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1902340

Report Date: 01/25/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1198765-3 QC Sample: L1902340-01 Client ID: RMW10_011719						
Chromium, Hexavalent	0.006J	0.004J	mg/l	NC		20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1902340**Project Number:** 170487001**Report Date:** 01/25/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-01A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-01B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-01C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-01D	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-01E	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902340-01F	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1902340-01G	Plastic 500ml unpreserved	A	7	7	2.3	Y	Absent		HEXCR-7196(1)
L1902340-01H	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1902340-01I	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1902340-01J	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1902340-01K	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1902340-01L	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-LVI(7)
L1902340-01M	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-LVI(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01251913:55
Lab Number: L1902340
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-01N	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1902340-01O	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1902340-02A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-02B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-02C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-02D	Plastic 60ml HNO3 preserved	B	7	<2	3.6	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-02D1	Plastic 60ml HNO3 preserved	B	7	<2	3.6	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-02D2	Plastic 60ml HNO3 preserved	B	7	<2	3.6	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-02D3	Plastic 60ml HNO3 preserved	B	7	<2	3.6	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01251913:55
Lab Number: L1902340
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-02E	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902340-02F	Plastic 250ml NaOH preserved	B	>12	>12	3.6	Y	Absent		TCN-9010(14)
L1902340-02G	Plastic 500ml unpreserved	B	7	7	3.6	Y	Absent		HEXCR-7196(1)
L1902340-02H	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1902340-02I	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1902340-02J	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1902340-02K	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1902340-02L	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-LVI(7)
L1902340-02M	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-LVI(7)
L1902340-02N	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1902340-02O	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1902340-03A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-03B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-03C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-03D	Plastic 250ml HNO3 preserved	C	7	<2	2.9	N	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-03E	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1902340

Project Number: 170487001

Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-03F	Plastic 250ml NaOH preserved	C	>12	>12	2.9	Y	Absent		TCN-9010(14)
L1902340-03G	Plastic 500ml unpreserved	C	7	7	2.9	Y	Absent		HEXCR-7196(1)
L1902340-03H	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-LVI(7)
L1902340-03I	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-LVI(7)
L1902340-03J	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1902340-03K	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1902340-03L	Amber 250ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270-LVI(7)
L1902340-03M	Amber 250ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270-LVI(7)
L1902340-03N	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1902340-03O	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1902340-04A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-04B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-04C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-04D	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-04E	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902340-04F	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1902340-04G	Plastic 500ml unpreserved	A	7	7	2.3	Y	Absent		HEXCR-7196(1)
L1902340-04H	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1902340-04I	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1902340-04J	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01251913:55
Lab Number: L1902340
Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-04K	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1902340-04L	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-LVI(7)
L1902340-04M	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-LVI(7)
L1902340-04N	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1902340-04O	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1902340-05A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-05B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-05C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-05D	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1902340-05E	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1902340-05F	Plastic 250ml NaOH preserved	C	>12	>12	2.9	Y	Absent		TCN-9010(14)
L1902340-05G	Plastic 500ml unpreserved	C	7	7	2.9	Y	Absent		HEXCR-7196(1)
L1902340-05H	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-LVI(7)
L1902340-05I	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-LVI(7)
L1902340-05J	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1902340-05K	Amber 120ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1902340-05L	Amber 250ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270-LVI(7)
L1902340-05M	Amber 250ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270-LVI(7)
L1902340-05N	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1902340-05O	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Serial_No:01251913:55

Lab Number: L1902340

Report Date: 01/25/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1902340-06A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)
L1902340-06B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1902340
Report Date: 01/25/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page of	Date Rec'd in Lab <i>1/18/19</i>	ALPHA Job # <i>4902340</i>									
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Project Information Project Name: Gerard Ave. + E. 146th St. Project Location: Bronx NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input checked="" type="checkbox"/> ASP-A <i>1/17/19</i> <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQiS (1 File) <input checked="" type="checkbox"/> EQiS (4 File) <input type="checkbox"/> Other	Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #								
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:									
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.					ANALYSIS			Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)	Total Bottles						
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs		Pesticides	Herbicides	TAL Metals (total & dissolved)	Hexavalent Chromium	Total Cyanide	Sample Specific Comments
<i>02340-01</i>	<i>RMW10_011719</i>	<i>1/17/19</i>	<i>1535</i>	<i>GW</i>	<i>JL</i>	<i>X</i>	<i>X</i>	<i>X</i>		<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	
<i>-02</i>	<i>RMW11_011719</i>	<i>↓</i>	<i>1345</i>	<i>↓</i>	<i>JL</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>Please preserve dissolved metals at lab</i>
<i>-03</i>	<i>RMW14_011719</i>	<i>↓</i>	<i>1200</i>	<i>↓</i>	<i>JL</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>Please preserve dissolved metals at lab</i>
<i>-04</i>	<i>RMW16_011719</i>	<i>↓</i>	<i>1315</i>	<i>↓</i>	<i>JL</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	
<i>-05</i>	<i>RMW17_011719</i>	<i>↓</i>	<i>0940</i>	<i>↓</i>	<i>JL</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>All dissolved metals field filtered</i>
<i>-06</i>	<i>GWTB04_011719</i>	<i>-</i>	<i>-</i>	<i>AG</i>	<i>JL</i>	<i>X</i>									
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)					
		Relinquished By: <i>[Signature]</i>		Date/Time: <i>1/17/19 - 4:00</i>		Received By: <i>[Signature]</i>		Date/Time: <i>1/17/19 16:00</i>							
		Relinquished By: <i>Paul Mayella</i>		Date/Time: <i>1/18/19 00:30</i>		Received By: <i>Paul Mayella</i>		Date/Time: <i>1/17/19 19:00</i>							



ANALYTICAL REPORT

Lab Number:	L1930730
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	404 EXTERIOR STREET
Project Number:	170487001
Report Date:	07/27/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1930730-01	RMW25_071219	WATER	BRONX, NY	07/12/19 10:35	07/12/19
L1930730-02	RMW23_071219	WATER	BRONX, NY	07/12/19 13:10	07/12/19
L1930730-03	GWTB05_071219	WATER	BRONX, NY	07/12/19 00:00	07/12/19
L1930730-04	GWFB_071219	WATER	BRONX, NY	07/12/19 13:00	07/12/19
L1930730-05	GWDUP_071219	WATER	BRONX, NY	07/12/19 00:00	07/12/19

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Case Narrative (continued)

Report Submission

July 27, 2019: This final report includes the results of all requested analyses.

July 16, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1930730-04: The Field Blank has a result for acetone present above the reporting limit. The sample was verified as being labeled correctly by the laboratory and the previous analysis showed there was no potential for carry over.

Perfluorinated Alkyl Acids by Isotope Dilution

L1930730-05: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

Total Metals

The WG1259915-1 Method Blank, associated with L1930730-01, -02, -04, and -05, has a concentration above the reporting limit for manganese. Since the sample was non-detect to the RL or had results greater than 10x the blank concentration for this analyte, no further actions were taken. The results of the original analysis are reported.

The WG1259915-3 MS recovery, performed on L1930730-01, is outside the acceptance criteria for aluminum (159%). A post digestion spike was performed and yielded an unacceptable recovery of 146%. The serial dilution recovery was acceptable; therefore, the matrix test passed for the sample matrix.

The WG1259915-3 MS recoveries, performed on L1930730-01, are outside the acceptance criteria for antimony (128%), magnesium (126%) and manganese (130%). A post digestion spike was performed and was within acceptance criteria.

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19


Case Narrative (continued)

The WG1259915-3 MS recoveries for calcium (165%), iron (210%) and sodium (55%), performed on L1930730-01, do not apply because the sample concentrations are greater than four times the spike amount added.

Dissolved Metals

The WG1259932-3 MS recovery for sodium (11%), performed on L1930730-01, does not apply because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Lisa Westerlind

Title: Technical Director/Representative

Date: 07/27/19

ORGANICS

VOLATILES

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/14/19 14:27
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	0.82	J	ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	2.7		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	106		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/14/19 14:55
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.32	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	1.1	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	1.1	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	4.9		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	105		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-03
Client ID: GWTB05_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/14/19 12:05
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-03
Client ID: GWTB05_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-03
Client ID: GWTB05_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/14/19 12:34
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	5.1		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	106		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/14/19 15:23
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.32	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	1.1	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	1.1	J	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.3	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	4.8		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	0.77	J	ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/14/19 11:37
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1259943-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/14/19 11:37
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1259943-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 07/14/19 11:37
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1259943-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	108		70-130



Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1259943-3 WG1259943-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		96		70-130	4		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	95		93		70-130	2		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	110		100		70-130	10		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	100		99		62-150	1		20
1,2-Dichloroethane	95		92		70-130	3		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	94		95		70-130	1		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	97		99		54-136	2		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	110		100		70-130	10		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	70		69		64-130	1		20
Bromomethane	89		81		39-139	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1259943-3 WG1259943-4								
Vinyl chloride	88		86		55-140	2		20
Chloroethane	91		91		55-138	0		20
1,1-Dichloroethene	110		100		61-145	10		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	100		99		70-130	1		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	110		100		63-130	10		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		100		70-130	10		20
Dibromomethane	100		97		70-130	3		20
1,2,3-Trichloropropane	100		99		64-130	1		20
Acrylonitrile	97		90		70-130	7		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	85		82		36-147	4		20
Acetone	100		96		58-148	4		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	92		89		63-138	3		20
Vinyl acetate	89		86		70-130	3		20
4-Methyl-2-pentanone	100		90		59-130	11		20
2-Hexanone	86		87		57-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1259943-3 WG1259943-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	100		99		64-130	1		20
Bromobenzene	100		99		70-130	1		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	81		79		70-130	3		20
tert-Butylbenzene	110		100		70-130	10		20
o-Chlorotoluene	120		120		70-130	0		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	100		100		41-144	0		20
Hexachlorobutadiene	98		98		63-130	0		20
Isopropylbenzene	110		100		70-130	10		20
p-Isopropyltoluene	110		100		70-130	10		20
Naphthalene	96		95		70-130	1		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	100		97		70-130	3		20
1,2,4-Trichlorobenzene	100		96		70-130	4		20
1,3,5-Trimethylbenzene	110		100		64-130	10		20
1,2,4-Trimethylbenzene	110		100		70-130	10		20
1,4-Dioxane	162		168	Q	56-162	4		20
p-Diethylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1259943-3 WG1259943-4								
p-Ethyltoluene	110		100		70-130	10		20
1,2,4,5-Tetramethylbenzene	100		98		70-130	2		20
Ethyl ether	110		100		59-134	10		20
trans-1,4-Dichloro-2-butene	98		96		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		96		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	100		101		70-130
Dibromofluoromethane	104		103		70-130

SEMIVOLATILES

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/14/19 22:16
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	49		10-120
4-Terphenyl-d14	72		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/13/19 10:52
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	169.		ng/l	150	33.9	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			42		15-110	

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/15/19 12:05
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.05	J	ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	62		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 00:00
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	4.80		ng/l	1.96	0.400	1
Perfluoropentanoic Acid (PFPeA)	11.9		ng/l	1.96	0.388	1
Perfluorobutanesulfonic Acid (PFBS)	0.969	J	ng/l	1.96	0.233	1
Perfluorohexanoic Acid (PFHxA)	10.2		ng/l	1.96	0.322	1
Perfluoroheptanoic Acid (PFHpA)	2.56		ng/l	1.96	0.221	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.96	0.369	1
Perfluorooctanoic Acid (PFOA)	5.51		ng/l	1.96	0.231	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.96	1.30	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.96	0.674	1
Perfluorononanoic Acid (PFNA)	0.824	J	ng/l	1.96	0.306	1
Perfluorooctanesulfonic Acid (PFOS)	3.71		ng/l	1.96	0.494	1
Perfluorodecanoic Acid (PFDA)	0.349	J	ng/l	1.96	0.298	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.96	1.19	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.96	0.635	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.96	0.255	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.96	0.961	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.96	0.569	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.96	0.788	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.96	0.365	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.96	0.321	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.96	0.243	1
PFOA/PFOS, Total	9.22		ng/l	1.96	0.231	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	102		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	103		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	111		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	143		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	82		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	120		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	60		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	80		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	28		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	62		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	72		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/14/19 22:42
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		21-120
Phenol-d6	69		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	103		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/13/19 11:18
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	166.		ng/l	150	33.9	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			39		15-110	

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/15/19 12:22
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.08	J	ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	119		10-120
4-Terphenyl-d14	91		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 00:17
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	10.6		ng/l	1.91	0.389	1
Perfluoropentanoic Acid (PFPeA)	7.74		ng/l	1.91	0.378	1
Perfluorobutanesulfonic Acid (PFBS)	1.12	J	ng/l	1.91	0.227	1
Perfluorohexanoic Acid (PFHxA)	6.12		ng/l	1.91	0.313	1
Perfluoroheptanoic Acid (PFHpA)	2.62		ng/l	1.91	0.215	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.91	0.359	1
Perfluorooctanoic Acid (PFOA)	6.44		ng/l	1.91	0.225	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.91	1.27	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.91	0.656	1
Perfluorononanoic Acid (PFNA)	1.68	J	ng/l	1.91	0.298	1
Perfluorooctanesulfonic Acid (PFOS)	9.03		ng/l	1.91	0.481	1
Perfluorodecanoic Acid (PFDA)	0.821	J	ng/l	1.91	0.290	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.91	1.16	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.91	0.618	1
Perfluoroundecanoic Acid (PFUnA)	0.828	J	ng/l	1.91	0.248	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.91	0.935	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.91	0.553	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.91	0.767	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.91	0.355	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.91	0.312	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.91	0.237	1
PFOA/PFOS, Total	15.5		ng/l	1.91	0.225	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	128		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	130		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	121		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	113		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	119		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	126		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	121		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	170		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	120		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	118		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	108		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	149		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	86		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	104		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	38		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	80		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	90		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	94		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/14/19 23:08
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		21-120
Phenol-d6	77		10-120
Nitrobenzene-d5	114		23-120
2-Fluorobiphenyl	96		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	100		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/13/19 11:44
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	150	33.9	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			39		15-110	

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/15/19 12:38
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	95		15-120
2,4,6-Tribromophenol	104		10-120
4-Terphenyl-d14	104		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 00:33
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.76	0.359	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.76	0.348	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.76	0.210	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.76	0.289	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.76	0.198	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.76	0.331	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.76	0.208	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.76	1.17	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.76	0.606	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.76	0.275	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.76	0.444	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.76	0.268	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.76	1.07	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.76	0.570	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.76	0.229	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.76	0.863	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.76	0.510	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.76	0.708	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.76	0.327	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.76	0.288	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.76	0.218	1
PFOA/PFOS, Total	ND		ng/l	1.76	0.208	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	133		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	139		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	133		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	137		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	135		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	133		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	131		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	107		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	137		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	129		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	125		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	116		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	128		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	78		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	95		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	115		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	113		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 07/14/19 23:34
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		21-120
Phenol-d6	68		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	101		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/13/19 12:10
 Analyst: MA

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	181.		ng/l	150	33.9	1
Surrogate			% Recovery	Qualifier	Acceptance Criteria	
1,4-Dioxane-d8			40		15-110	

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 07/15/19 12:55
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	0.10		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	57		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	97		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 00:50
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	33.8		ng/l	1.84	0.376	1
Perfluoropentanoic Acid (PFPeA)	7.61		ng/l	1.84	0.365	1
Perfluorobutanesulfonic Acid (PFBS)	1.27	J	ng/l	1.84	0.220	1
Perfluorohexanoic Acid (PFHxA)	5.88		ng/l	1.84	0.302	1
Perfluoroheptanoic Acid (PFHpA)	2.59		ng/l	1.84	0.208	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.84	0.347	1
Perfluorooctanoic Acid (PFOA)	6.07		ng/l	1.84	0.218	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.84	1.23	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.84	0.635	1
Perfluorononanoic Acid (PFNA)	1.74	J	ng/l	1.84	0.288	1
Perfluorooctanesulfonic Acid (PFOS)	10.9		ng/l	1.84	0.465	1
Perfluorodecanoic Acid (PFDA)	1.50	J	ng/l	1.84	0.280	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.84	1.12	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.786	J	ng/l	1.84	0.598	1
Perfluoroundecanoic Acid (PFUnA)	1.56	J	ng/l	1.84	0.240	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.84	0.904	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.84	0.535	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.84	0.742	1
Perfluorododecanoic Acid (PFDoA)	1.02	J	ng/l	1.84	0.343	1
Perfluorotridecanoic Acid (PFTrDA)	0.878	J	ng/l	1.84	0.302	1
Perfluorotetradecanoic Acid (PFTA)	0.579	J	ng/l	1.84	0.229	1
PFOA/PFOS, Total	17.0		ng/l	1.84	0.218	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	137		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	139		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	150		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	132		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	139		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	155	Q	47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	144		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	201		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	142		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	145		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	127		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	194	Q	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	105		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	130		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	52		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	94		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	110		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	106		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/12/19 10:19
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatle Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258944-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	2.8	J	ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/12/19 10:19
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258944-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/12/19 10:19
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258944-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	56		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	84		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D-SIM
Analytical Date: 07/12/19 12:00
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:52

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258945-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/12/19 12:00
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 03:52

Parameter	Result	Qualifier	Units	RL	MDL
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Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1258945-1

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	80		10-120
4-Terphenyl-d14	82		41-149

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/13/19 09:37
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 07:45

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1259465-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		15-110

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/25/19 21:48
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1263687-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/25/19 21:48
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1263687-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	102		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	109		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	106		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	107		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	103		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	101		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	85		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	76		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	83		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	37		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	70		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	80		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258944-2 WG1258944-3								
Acenaphthene	77		76		37-111	1		30
1,2,4-Trichlorobenzene	73		76		39-98	4		30
Hexachlorobenzene	67		68		40-140	1		30
Bis(2-chloroethyl)ether	76		78		40-140	3		30
2-Chloronaphthalene	80		80		40-140	0		30
1,2-Dichlorobenzene	70		74		40-140	6		30
1,3-Dichlorobenzene	67		71		40-140	6		30
1,4-Dichlorobenzene	68		73		36-97	7		30
3,3'-Dichlorobenzidine	68		88		40-140	26		30
2,4-Dinitrotoluene	95		94		48-143	1		30
2,6-Dinitrotoluene	93		94		40-140	1		30
Fluoranthene	91		86		40-140	6		30
4-Chlorophenyl phenyl ether	77		76		40-140	1		30
4-Bromophenyl phenyl ether	73		75		40-140	3		30
Bis(2-chloroisopropyl)ether	65		67		40-140	3		30
Bis(2-chloroethoxy)methane	88		87		40-140	1		30
Hexachlorobutadiene	68		68		40-140	0		30
Hexachlorocyclopentadiene	75		71		40-140	5		30
Hexachloroethane	73		78		40-140	7		30
Isophorone	95		95		40-140	0		30
Naphthalene	75		77		40-140	3		30
Nitrobenzene	86		87		40-140	1		30
NDPA/DPA	71		84		40-140	17		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258944-2 WG1258944-3								
n-Nitrosodi-n-propylamine	97		95		29-132			30
Bis(2-ethylhexyl)phthalate	102		94		40-140			30
Butyl benzyl phthalate	115		102		40-140			30
Di-n-butylphthalate	96		90		40-140			30
Di-n-octylphthalate	121		113		40-140			30
Diethyl phthalate	91		90		40-140			30
Dimethyl phthalate	99		96		40-140			30
Benzo(a)anthracene	92		91		40-140			30
Benzo(a)pyrene	85		83		40-140			30
Benzo(b)fluoranthene	94		83		40-140			30
Benzo(k)fluoranthene	90		96		40-140			30
Chrysene	77		77		40-140			30
Acenaphthylene	90		90		45-123			30
Anthracene	84		86		40-140			30
Benzo(ghi)perylene	88		88		40-140			30
Fluorene	83		82		40-140			30
Phenanthrene	82		78		40-140			30
Dibenzo(a,h)anthracene	84		84		40-140			30
Indeno(1,2,3-cd)pyrene	82		84		40-140			30
Pyrene	88		83		26-127			30
Biphenyl	74		72		40-140			30
4-Chloroaniline	63		61		40-140			30
2-Nitroaniline	97		94		52-143			30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258944-2 WG1258944-3								
3-Nitroaniline	78		76		25-145	3		30
4-Nitroaniline	94		87		51-143	8		30
Dibenzofuran	77		77		40-140	0		30
2-Methylnaphthalene	76		76		40-140	0		30
1,2,4,5-Tetrachlorobenzene	64		65		2-134	2		30
Acetophenone	74		75		39-129	1		30
2,4,6-Trichlorophenol	92		91		30-130	1		30
p-Chloro-m-cresol	100	Q	96		23-97	4		30
2-Chlorophenol	86		87		27-123	1		30
2,4-Dichlorophenol	95		94		30-130	1		30
2,4-Dimethylphenol	81		94		30-130	15		30
2-Nitrophenol	96		95		30-130	1		30
4-Nitrophenol	84	Q	80		10-80	5		30
2,4-Dinitrophenol	102		99		20-130	3		30
4,6-Dinitro-o-cresol	109		107		20-164	2		30
Pentachlorophenol	96		93		9-103	3		30
Phenol	66		72		12-110	9		30
2-Methylphenol	84		89		30-130	6		30
3-Methylphenol/4-Methylphenol	87		91		30-130	4		30
2,4,5-Trichlorophenol	93		88		30-130	6		30
Benzoic Acid	113		112		10-164	1		30
Benzyl Alcohol	91		92		26-116	1		30
Carbazole	93		89		55-144	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258944-2 WG1258944-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	75		84		21-120
Phenol-d6	69		74		10-120
Nitrobenzene-d5	96		95		23-120
2-Fluorobiphenyl	82		78		15-120
2,4,6-Tribromophenol	76		77		10-120
4-Terphenyl-d14	87		79		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258945-2 WG1258945-3								
Acenaphthene	74		78		40-140	5		40
2-Chloronaphthalene	74		74		40-140	0		40
Fluoranthene	76		75		40-140	1		40
Hexachlorobutadiene	66		68		40-140	3		40
Naphthalene	74		75		40-140	1		40
Benzo(a)anthracene	77		78		40-140	1		40
Benzo(a)pyrene	66		82		40-140	22		40
Benzo(b)fluoranthene	80		78		40-140	3		40
Benzo(k)fluoranthene	84		83		40-140	1		40
Chrysene	77		79		40-140	3		40
Acenaphthylene	75		77		40-140	3		40
Anthracene	78		82		40-140	5		40
Benzo(ghi)perylene	77		79		40-140	3		40
Fluorene	77		77		40-140	0		40
Phenanthrene	78		77		40-140	1		40
Dibenzo(a,h)anthracene	85		83		40-140	2		40
Indeno(1,2,3-cd)pyrene	80		82		40-140	2		40
Pyrene	72		74		40-140	3		40
2-Methylnaphthalene	74		75		40-140	1		40
Pentachlorophenol	93		87		40-140	7		40
Hexachlorobenzene	81		81		40-140	0		40
Hexachloroethane	73		75		40-140	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1258945-2 WG1258945-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	53		66		21-120
Phenol-d6	42		54		10-120
Nitrobenzene-d5	77		79		23-120
2-Fluorobiphenyl	69		70		15-120
2,4,6-Tribromophenol	75		85		10-120
4-Terphenyl-d14	76		75		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259465-2 WG1259465-3								
1,4-Dioxane	105		108		40-140	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	46		37		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1263687-2 WG1263687-3								
Perfluorobutanoic Acid (PFBA)	97		99		67-148	2		30
Perfluoropentanoic Acid (PFPeA)	104		106		63-161	2		30
Perfluorobutanesulfonic Acid (PFBS)	98		99		65-157	1		30
Perfluorohexanoic Acid (PFHxA)	108		110		69-168	2		30
Perfluoroheptanoic Acid (PFHpA)	98		98		58-159	0		30
Perfluorohexanesulfonic Acid (PFHxS)	104		107		69-177	3		30
Perfluorooctanoic Acid (PFOA)	101		102		63-159	1		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	102		108		49-187	6		30
Perfluoroheptanesulfonic Acid (PFHpS)	110		101		61-179	9		30
Perfluorononanoic Acid (PFNA)	106		105		68-171	1		30
Perfluorooctanesulfonic Acid (PFOS)	86		86		52-151	0		30
Perfluorodecanoic Acid (PFDA)	106		111		63-171	5		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	108		113		56-173	5		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	104		100		60-166	4		30
Perfluoroundecanoic Acid (PFUnA)	92		94		60-153	2		30
Perfluorodecanesulfonic Acid (PFDS)	101		101		38-156	0		30
Perfluorooctanesulfonamide (FOSA)	105		97		46-170	8		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	96		87		45-170	10		30
Perfluorododecanoic Acid (PFDoA)	96		100		67-153	4		30
Perfluorotridecanoic Acid (PFTrDA)	91		100		48-158	9		30
Perfluorotetradecanoic Acid (PFTA)	110		109		59-182	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1263687-2 WG1263687-3									

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	109		118		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		125		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	115		120		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	111		122		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		119		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	116		115		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		116		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	92		102		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	108		116		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		108		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98		99		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95		97		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	80		93		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96		99		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	39		49		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	79		85		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	88		93		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		99		33-143

PCBS

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/14/19 23:36
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/13/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/14/19 23:49
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/13/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	56		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 07/14/19 23:22
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/13/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 07/15/19 00:03
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:04
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/13/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/13/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/13/19 11:34
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 09:42
Cleanup Method: EPA 3665A
Cleanup Date: 07/12/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259122-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	88		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259122-2 WG1259122-3									
Aroclor 1016	70		77		40-140	9		50	A
Aroclor 1260	68		81		40-140	17		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		82		30-150	A
Decachlorobiphenyl	82		103		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		78		30-150	B
Decachlorobiphenyl	79		96		30-150	B

PESTICIDES

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/16/19 10:31
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 07/16/19 11:27
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 07/13/19 02:47

Methylation Date: 07/14/19 12:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	92		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 07/16/19 10:43
 Analyst: AMC

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 07/16/19 11:46
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 07/13/19 02:47

Methylation Date: 07/14/19 12:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	87		30-150	A
DCAA	73		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 07/16/19 10:56
 Analyst: AMC

Extraction Method: EPA 3510C
 Extraction Date: 07/13/19 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	79		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 07/16/19 01:17
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 07/13/19 02:47

Methylation Date: 07/14/19 12:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	100		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 07/16/19 11:09
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/13/19 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 07/16/19 12:05
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 07/13/19 02:47

Methylation Date: 07/14/19 12:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	103		30-150	A
DCAA	87		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/16/19 11:21
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 09:54

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259126-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	0.003	JP	ug/l	0.014	0.002	A
Endrin aldehyde	0.013	JP	ug/l	0.029	0.006	A
Endrin ketone	0.010	JP	ug/l	0.029	0.003	A
Dieldrin	0.004	J	ug/l	0.029	0.003	A
Endosulfan I	0.004	J	ug/l	0.014	0.002	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
Chlordane	ND		ug/l	0.143	0.033	A
Lindane	0.004	JP	ug/l	0.014	0.003	B
Alpha-BHC	ND		ug/l	0.014	0.003	B
Aldrin	0.002	J	ug/l	0.014	0.002	B
Heptachlor epoxide	ND		ug/l	0.014	0.003	B
Endrin	ND		ug/l	0.029	0.003	B
4,4'-DDE	ND		ug/l	0.029	0.003	B
4,4'-DDD	ND		ug/l	0.029	0.003	B
4,4'-DDT	0.003	JP	ug/l	0.029	0.003	B
Endosulfan II	0.004	J	ug/l	0.029	0.004	B
Methoxychlor	ND		ug/l	0.143	0.005	B
trans-Chlordane	0.006	J	ug/l	0.014	0.004	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/16/19 11:21
Analyst: AMC

Extraction Method: EPA 3510C
Extraction Date: 07/12/19 09:54

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259126-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 07/15/19 15:35
Analyst: SL

Extraction Method: EPA 8151A
Extraction Date: 07/12/19 10:39

Methylation Date: 07/12/19 18:58

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259159-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	80		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259126-2 WG1259126-3									
Delta-BHC	89		82		30-150	8		20	A
Lindane	86		80		30-150	7		20	A
Alpha-BHC	87		80		30-150	8		20	A
Beta-BHC	88		80		30-150	9		20	A
Heptachlor	80		75		30-150	7		20	A
Aldrin	77		71		30-150	8		20	A
Heptachlor epoxide	85		80		30-150	7		20	A
Endrin	85		80		30-150	5		20	A
Endrin aldehyde	72		68		30-150	6		20	A
Endrin ketone	86		80		30-150	7		20	A
Dieldrin	86		80		30-150	8		20	A
4,4'-DDE	85		77		30-150	11		20	A
4,4'-DDD	85		79		30-150	8		20	A
4,4'-DDT	82		76		30-150	7		20	A
Endosulfan I	78		71		30-150	9		20	A
Endosulfan II	81		75		30-150	7		20	A
Endosulfan sulfate	77		73		30-150	5		20	A
Methoxychlor	72		68		30-150	6		20	A
cis-Chlordane	83		78		30-150	6		20	A
trans-Chlordane	81		75		30-150	8		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259126-2 WG1259126-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		74		30-150	A
Decachlorobiphenyl	71		66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		80		30-150	B
Decachlorobiphenyl	95		84		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259159-2 WG1259159-3									
2,4-D	114		106		30-150	7		25	A
2,4,5-T	127		117		30-150	8		25	A
2,4,5-TP (Silvex)	121		111		30-150	9		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	94		86		30-150	A
DCAA	91		83		30-150	B

METALS

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.85		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Antimony, Total	0.00132	J	mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00663		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Barium, Total	0.08246		mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00016	J	mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Calcium, Total	82.8		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Chromium, Total	0.00456		mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00395		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Copper, Total	0.03070		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Iron, Total	10.6		mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Lead, Total	0.1360		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Magnesium, Total	13.2		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Manganese, Total	1.444		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:35	EPA 7470A	1,7470A	GD
Nickel, Total	0.00609		mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Potassium, Total	12.5		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Sodium, Total	70.7		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00483	J	mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
Zinc, Total	0.1069		mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 10:13	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		07/16/19 10:13	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
 Client ID: RMW25_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0113		mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00121	J	mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00518		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.05286		mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Calcium, Dissolved	83.6		mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00023	J	mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00215		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00051	J	mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Iron, Dissolved	6.95		mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00087	J	mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	12.7		mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.270		mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 13:29	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00316		mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Potassium, Dissolved	12.7		mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Sodium, Dissolved	73.0		mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.02495		mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 01:52	EPA 3005A	1,6020B	AM



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0499		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Antimony, Total	0.00058	J	mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00172		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Barium, Total	0.06463		mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00009	J	mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Calcium, Total	72.3		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Chromium, Total	0.00026	J	mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00136		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Copper, Total	0.01157		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Iron, Total	1.20		mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Lead, Total	0.00477		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Magnesium, Total	17.6		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Manganese, Total	1.403		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:36	EPA 7470A	1,7470A	GD
Nickel, Total	0.00193	J	mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Potassium, Total	11.7		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Sodium, Total	75.1		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
Zinc, Total	0.01406		mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 10:17	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		07/16/19 10:17	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
 Client ID: RMW23_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00414	J	mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00072	J	mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00136		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.06076		mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Calcium, Dissolved	71.4		mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00113		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00458		mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.728		mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00120		mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	16.6		mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.324		mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 14:16	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00172	J	mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Potassium, Dissolved	11.6		mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Sodium, Dissolved	70.7		mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01399		mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 01:56	EPA 3005A	1,6020B	AM



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Barium, Total	0.00028	J	mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Iron, Total	0.0297	J	mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:38	EPA 7470A	1,7470A	GD
Nickel, Total	ND		mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
Zinc, Total	0.00673	J	mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 09:51	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		07/16/19 09:51	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
 Client ID: GWFB_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.00041	J	mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Calcium, Dissolved	0.0908	J	mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00018	J	mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 14:18	EPA 7470A	1,7470A	GD
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Sodium, Dissolved	0.0327	J	mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01215		mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 02:01	EPA 3005A	1,6020B	AM



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.118		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Antimony, Total	0.00052	J	mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00159		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Barium, Total	0.06147		mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Calcium, Total	66.7		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Chromium, Total	0.00049	J	mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00136		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Copper, Total	0.01137		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Iron, Total	1.20		mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Lead, Total	0.00702		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Magnesium, Total	16.5		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Manganese, Total	1.348		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:43	EPA 7470A	1,7470A	GD
Nickel, Total	0.00196	J	mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Potassium, Total	11.0		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Sodium, Total	70.4		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
Zinc, Total	0.01534		mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 10:21	EPA 3005A	1,6020B	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		07/16/19 10:21	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
 Client ID: GWDUP_071219
 Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
 Date Received: 07/12/19
 Field Prep: Refer to COC

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00362	J	mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00052	J	mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00138		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.05821		mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Calcium, Dissolved	65.9		mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00113		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00437		mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.656		mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00129		mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	15.8		mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.288		mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 14:20	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00176	J	mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Potassium, Dissolved	10.7		mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Sodium, Dissolved	66.6		mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM
Zinc, Dissolved	0.01134		mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 02:05	EPA 3005A	1,6020B	AM



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1259915-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Antimony, Total	0.00075	J	mg/l	0.00400	0.00042	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Iron, Total	0.0403	J	mg/l	0.0700	0.0191	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Manganese, Total	0.02228		mg/l	0.00100	0.00044	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Thallium, Total	0.00022	J	mg/l	0.00050	0.00014	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	07/13/19 10:30	07/16/19 09:47	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1259932-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Antimony, Dissolved	0.00071	J	mg/l	0.00400	0.00042	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis Batch Quality Control

Barium, Dissolved	ND	mg/l	0.00050	0.00017	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Beryllium, Dissolved	ND	mg/l	0.00050	0.00010	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Cadmium, Dissolved	ND	mg/l	0.00020	0.00005	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Calcium, Dissolved	ND	mg/l	0.100	0.0394	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Chromium, Dissolved	ND	mg/l	0.00100	0.00017	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Cobalt, Dissolved	ND	mg/l	0.00050	0.00016	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Copper, Dissolved	ND	mg/l	0.00100	0.00038	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Iron, Dissolved	ND	mg/l	0.0500	0.0191	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Lead, Dissolved	ND	mg/l	0.00100	0.00034	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Magnesium, Dissolved	ND	mg/l	0.0700	0.0242	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Manganese, Dissolved	ND	mg/l	0.00100	0.00044	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Nickel, Dissolved	ND	mg/l	0.00200	0.00055	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Potassium, Dissolved	ND	mg/l	0.100	0.0309	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Selenium, Dissolved	ND	mg/l	0.00500	0.00173	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Silver, Dissolved	ND	mg/l	0.00040	0.00016	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Sodium, Dissolved	ND	mg/l	0.100	0.0293	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Thallium, Dissolved	ND	mg/l	0.00050	0.00014	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Vanadium, Dissolved	ND	mg/l	0.00500	0.00157	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM
Zinc, Dissolved	ND	mg/l	0.01000	0.00341	1	07/15/19 11:15	07/16/19 01:30	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1260028-1									
Mercury, Total	ND	mg/l	0.00020	0.00009	1	07/15/19 15:12	07/15/19 18:03	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02,04-05 Batch: WG1260047-1									
Mercury, Dissolved	ND	mg/l	0.00020	0.00009	1	07/15/19 15:55	07/16/19 13:19	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259915-2								
Aluminum, Total	115		-		80-120	-		
Antimony, Total	98		-		80-120	-		
Arsenic, Total	107		-		80-120	-		
Barium, Total	105		-		80-120	-		
Beryllium, Total	116		-		80-120	-		
Cadmium, Total	112		-		80-120	-		
Calcium, Total	109		-		80-120	-		
Chromium, Total	110		-		80-120	-		
Cobalt, Total	109		-		80-120	-		
Copper, Total	101		-		80-120	-		
Iron, Total	118		-		80-120	-		
Lead, Total	113		-		80-120	-		
Magnesium, Total	113		-		80-120	-		
Manganese, Total	109		-		80-120	-		
Nickel, Total	106		-		80-120	-		
Potassium, Total	109		-		80-120	-		
Selenium, Total	113		-		80-120	-		
Silver, Total	106		-		80-120	-		
Sodium, Total	110		-		80-120	-		
Thallium, Total	108		-		80-120	-		
Vanadium, Total	111		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259915-2					
Zinc, Total	116	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259932-2					
Aluminum, Dissolved	110	-	80-120	-	
Antimony, Dissolved	88	-	80-120	-	
Arsenic, Dissolved	103	-	80-120	-	
Barium, Dissolved	104	-	80-120	-	
Beryllium, Dissolved	102	-	80-120	-	
Cadmium, Dissolved	106	-	80-120	-	
Calcium, Dissolved	95	-	80-120	-	
Chromium, Dissolved	101	-	80-120	-	
Cobalt, Dissolved	97	-	80-120	-	
Copper, Dissolved	94	-	80-120	-	
Iron, Dissolved	98	-	80-120	-	
Lead, Dissolved	102	-	80-120	-	
Magnesium, Dissolved	108	-	80-120	-	
Manganese, Dissolved	103	-	80-120	-	
Nickel, Dissolved	97	-	80-120	-	
Potassium, Dissolved	108	-	80-120	-	
Selenium, Dissolved	113	-	80-120	-	
Silver, Dissolved	97	-	80-120	-	
Sodium, Dissolved	106	-	80-120	-	
Thallium, Dissolved	98	-	80-120	-	
Vanadium, Dissolved	99	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1259932-2					
Zinc, Dissolved	108	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1260028-2					
Mercury, Total	93	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 Batch: WG1260047-2					
Mercury, Dissolved	92	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259915-3 QC Sample: L1930730-01 Client ID: RMW25_071219												
Aluminum, Total	1.85	2	5.03	159	Q	-	-		75-125	-		20
Antimony, Total	0.00132J	0.5	0.6399	128	Q	-	-		75-125	-		20
Arsenic, Total	0.00663	0.12	0.1355	107		-	-		75-125	-		20
Barium, Total	0.08246	2	2.211	106		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.05837	117		-	-		75-125	-		20
Cadmium, Total	0.00016J	0.051	0.05703	112		-	-		75-125	-		20
Calcium, Total	82.8	10	99.3	165	Q	-	-		75-125	-		20
Chromium, Total	0.00456	0.2	0.2260	111		-	-		75-125	-		20
Cobalt, Total	0.00395	0.5	0.5400	107		-	-		75-125	-		20
Copper, Total	0.03070	0.25	0.2852	102		-	-		75-125	-		20
Iron, Total	10.6	1	12.7	210	Q	-	-		75-125	-		20
Lead, Total	0.1360	0.51	0.7256	116		-	-		75-125	-		20
Magnesium, Total	13.2	10	25.8	126	Q	-	-		75-125	-		20
Manganese, Total	1.444	0.5	2.093	130	Q	-	-		75-125	-		20
Nickel, Total	0.00609	0.5	0.5255	104		-	-		75-125	-		20
Potassium, Total	12.5	10	24.6	121		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.136	113		-	-		75-125	-		20
Silver, Total	ND	0.05	0.05315	106		-	-		75-125	-		20
Sodium, Total	70.7	10	76.2	55	Q	-	-		75-125	-		20
Thallium, Total	ND	0.12	0.1328	111		-	-		75-125	-		20
Vanadium, Total	0.00483J	0.5	0.5758	115		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259915-3 QC Sample: L1930730-01 Client ID: RMW25_071219									
Zinc, Total	0.1069	0.5	0.6862	116	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259932-3 QC Sample: L1930730-01 Client ID: RMW25_071219									
Aluminum, Dissolved	0.0113	2	2.30	114	-	-	75-125	-	20
Antimony, Dissolved	0.00121J	0.5	0.6258	125	-	-	75-125	-	20
Arsenic, Dissolved	0.00518	0.12	0.1293	103	-	-	75-125	-	20
Barium, Dissolved	0.05286	2	2.160	105	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.04972	99	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05435	106	-	-	75-125	-	20
Calcium, Dissolved	83.6	10	93.9	103	-	-	75-125	-	20
Chromium, Dissolved	0.00023J	0.2	0.2021	101	-	-	75-125	-	20
Cobalt, Dissolved	0.00215	0.5	0.5068	101	-	-	75-125	-	20
Copper, Dissolved	0.00051J	0.25	0.2389	96	-	-	75-125	-	20
Iron, Dissolved	6.95	1	8.00	105	-	-	75-125	-	20
Lead, Dissolved	0.00087J	0.51	0.5526	108	-	-	75-125	-	20
Magnesium, Dissolved	12.7	10	24.5	118	-	-	75-125	-	20
Manganese, Dissolved	1.270	0.5	1.856	117	-	-	75-125	-	20
Nickel, Dissolved	0.00316	0.5	0.4942	98	-	-	75-125	-	20
Potassium, Dissolved	12.7	10	22.8	101	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.141	118	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05038	101	-	-	75-125	-	20
Sodium, Dissolved	73.0	10	74.1	11	Q	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1269	106	-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.5200	104	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259932-3 QC Sample: L1930730-01 Client ID: RMW25_071219									
Zinc, Dissolved	0.02495	0.5	0.5819	111	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1260028-3 WG1260028-4 QC Sample: L1929167-02 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00437	87	0.00431	86	75-125	1	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1260047-3 QC Sample: L1929714-04 Client ID: MS Sample									
Mercury, Dissolved	ND	0.005	0.00436	87	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259915-4 QC Sample: L1930730-01 Client ID: RMW25_071219						
Aluminum, Total	1.85	1.82	mg/l	2		20
Antimony, Total	0.00132J	0.00299J	mg/l	NC		20
Arsenic, Total	0.00663	0.00638	mg/l	4		20
Barium, Total	0.08246	0.08286	mg/l	0		20
Beryllium, Total	ND	0.00015J	mg/l	NC		20
Cadmium, Total	0.00016J	0.00016J	mg/l	NC		20
Calcium, Total	82.8	82.3	mg/l	1		20
Chromium, Total	0.00456	0.00449	mg/l	2		20
Cobalt, Total	0.00395	0.00381	mg/l	4		20
Copper, Total	0.03070	0.03011	mg/l	2		20
Iron, Total	10.6	10.5	mg/l	1		20
Lead, Total	0.1360	0.1345	mg/l	1		20
Magnesium, Total	13.2	13.0	mg/l	2		20
Manganese, Total	1.444	1.434	mg/l	1		20
Nickel, Total	0.00609	0.00599	mg/l	2		20
Potassium, Total	12.5	12.5	mg/l	0		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Sodium, Total	70.7	70.6	mg/l	0		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259915-4 QC Sample: L1930730-01 Client ID: RMW25_071219					
Thallium, Total	ND	0.00020J	mg/l	NC	20
Vanadium, Total	0.00483J	0.00445J	mg/l	NC	20
Zinc, Total	0.1069	0.1042	mg/l	3	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259932-4 QC Sample: L1930730-01 Client ID: RMW25_071219					
Aluminum, Dissolved	0.0113	0.0117	mg/l	3	20
Antimony, Dissolved	0.00121J	0.00332J	mg/l	NC	20
Arsenic, Dissolved	0.00518	0.00532	mg/l	3	20
Barium, Dissolved	0.05286	0.05426	mg/l	3	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	83.6	86.2	mg/l	3	20
Chromium, Dissolved	0.00023J	0.00022J	mg/l	NC	20
Cobalt, Dissolved	0.00215	0.00209	mg/l	3	20
Copper, Dissolved	0.00051J	0.00055J	mg/l	NC	20
Iron, Dissolved	6.95	6.89	mg/l	1	20
Lead, Dissolved	0.00087J	0.00095J	mg/l	NC	20
Magnesium, Dissolved	12.7	12.9	mg/l	2	20
Manganese, Dissolved	1.270	1.292	mg/l	2	20
Nickel, Dissolved	0.00316	0.00321	mg/l	2	20
Potassium, Dissolved	12.7	13.1	mg/l	3	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	73.0	73.0	mg/l	0	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259932-4 QC Sample: L1930730-01 Client ID: RMW25_071219					
Thallium, Dissolved	ND	0.00022J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.02495	0.02468	mg/l	1	20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1260047-4 QC Sample: L1929714-04 Client ID: DUP Sample					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-01
Client ID: RMW25_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 10:35
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 13:17	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:56	1,7196A	MA



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-02
Client ID: RMW23_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:10
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 13:18	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:56	1,7196A	MA



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-04
Client ID: GWFB_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 13:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 13:19	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:57	1,7196A	MA



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

SAMPLE RESULTS

Lab ID: L1930730-05
Client ID: GWDUP_071219
Sample Location: BRONX, NY

Date Collected: 07/12/19 00:00
Date Received: 07/12/19
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 13:20	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:57	1,7196A	MA



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259435-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/13/19 02:45	07/13/19 02:55	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 01-02,04-05 Batch: WG1259715-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	07/14/19 14:10	07/15/19 12:40	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930730

Report Date: 07/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259435-2								
Chromium, Hexavalent	101		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 Batch: WG1259715-2 WG1259715-3								
Cyanide, Total	95		96		85-115	1		20

Matrix Spike Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259435-4 QC Sample: L1930730-05 Client ID: GWDUP_071219												
Chromium, Hexavalent	ND	0.1	0.098	98		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259715-4 WG1259715-5 QC Sample: L1930690-03 Client ID: MS Sample												
Cyanide, Total	0.013	0.2	0.122	54	Q	0.172	79	Q	80-120	34	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-05 QC Batch ID: WG1259435-3 QC Sample: L1930730-05 Client ID: GWDUP_071219						
Chromium, Hexavalent	ND	ND	mg/l	NC		20

Project Name: 404 EXTERIOR STREET**Lab Number:** L1930730**Project Number:** 170487001**Report Date:** 07/27/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-01A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-01B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-01C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-01D	Plastic 250ml unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-01E	Plastic 250ml unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-01F	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1930730-01G	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1930730-01H	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930730-01I	Plastic 500ml unpreserved	A	7	7	2.3	Y	Absent		HEXCR-7196(1)
L1930730-01J	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1930730-01K	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1930730-01L	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1930730-01M	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1930730-01N	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-01O	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-01P	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-01Q	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-01R	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1930730-01S	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1930730-02A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-02B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-02C	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-02D	Plastic 250ml unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-02E	Plastic 250ml unpreserved	A	NA		2.3	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-02F	Plastic 250ml NaOH preserved	A	>12	>12	2.3	Y	Absent		TCN-9010(14)
L1930730-02G	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1930730-02H	Plastic 250ml HNO3 preserved	A	<2	<2	2.3	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930730-02I	Plastic 500ml unpreserved	A	7	7	2.3	Y	Absent		HEXCR-7196(1)
L1930730-02J	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1930730-02K	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8082-LVI(7)
L1930730-02L	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1930730-02M	Amber 120ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8081(7)
L1930730-02N	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-02O	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		A2-1,4-DIOXANE-SIM(7)

Project Name: 404 EXTERIOR STREET

Lab Number: L1930730

Project Number: 170487001

Report Date: 07/27/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-02P	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-02Q	Amber 250ml unpreserved	A	7	7	2.3	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-02R	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1930730-02S	Amber 1000ml unpreserved	A	7	7	2.3	Y	Absent		HERB-APA(7)
L1930730-03A	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-03B	Vial HCl preserved	A	NA		2.3	Y	Absent		NYTCL-8260(14)
L1930730-04A	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-04B	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-04C	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-04D	Plastic 250ml unpreserved	B	NA		2.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-04F	Plastic 250ml NaOH preserved	B	>12	>12	2.0	Y	Absent		TCN-9010(14)
L1930730-04G	Plastic 250ml HNO3 preserved	B	<2	<2	2.0	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1930730-04H	Plastic 250ml HNO3 preserved	B	<2	<2	2.0	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930730-04I	Plastic 500ml unpreserved	B	7	7	2.0	Y	Absent		HEXCR-7196(1)
L1930730-04J	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8082-LVI(7)
L1930730-04K	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8082-LVI(7)
L1930730-04L	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8081(7)
L1930730-04M	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8081(7)
L1930730-04N	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-04O	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Serial_No:07271908:41
Lab Number: L1930730
Report Date: 07/27/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-04P	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-04Q	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-04R	Amber 1000ml unpreserved	B	7	7	2.0	Y	Absent		HERB-APA(7)
L1930730-04S	Amber 1000ml unpreserved	B	7	7	2.0	Y	Absent		HERB-APA(7)
L1930730-05A	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-05B	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-05C	Vial HCl preserved	B	NA		2.0	Y	Absent		NYTCL-8260(14)
L1930730-05D	Plastic 250ml unpreserved	B	NA		2.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-05E	Plastic 250ml unpreserved	B	NA		2.0	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930730-05F	Plastic 250ml NaOH preserved	B	>12	>12	2.0	Y	Absent		TCN-9010(14)
L1930730-05G	Plastic 250ml HNO3 preserved	B	<2	<2	2.0	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1930730-05H	Plastic 250ml HNO3 preserved	B	<2	<2	2.0	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1930730-05I	Plastic 500ml unpreserved	B	7	7	2.0	Y	Absent		HEXCR-7196(1)
L1930730-05J	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8082-LVI(7)
L1930730-05K	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8082-LVI(7)
L1930730-05L	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8081(7)
L1930730-05M	Amber 120ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8081(7)
L1930730-05N	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-05O	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1930730-05P	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Serial_No:07271908:41

Lab Number: L1930730

Report Date: 07/27/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930730-05Q	Amber 250ml unpreserved	B	7	7	2.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1930730-05R	Amber 1000ml unpreserved	B	7	7	2.0	Y	Absent		HERB-APA(7)
L1930730-05S	Amber 1000ml unpreserved	B	7	7	2.0	Y	Absent		HERB-APA(7)

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930730
Report Date: 07/27/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab <u>7/12/19</u>	ALPHA Job # <u>L1930730</u>																																													
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A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Mansfield: Certification No: MA015		P P V A A A A A A A O A A A C A																																													
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ANALYTICAL REPORT

Lab Number:	L1852610
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE + E. 146TH ST.
Project Number:	170487001
Report Date:	01/03/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1852610-01	RB07_0-2	SOIL	BRONX, NY	12/20/18 12:10	12/20/18
L1852610-02	RB07_8-10	SOIL	BRONX, NY	12/20/18 13:30	12/20/18
L1852610-03	RB07_10-12	SOIL	BRONX, NY	12/20/18 13:45	12/20/18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Total Metals

L1852610-01, -02 and -03: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1192853-3 MS recovery, performed on L1852610-01, is outside the acceptance criteria for barium (18%). A post digestion spike was performed and was within acceptance criteria.

The WG1192853-3 MS recoveries for calcium (1380%), iron (686%), magnesium (127%) and manganese (190%), performed on L1852610-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1192853-3 MS recovery, performed on L1852610-01, is outside the acceptance criteria for lead (11%). A post digestion spike was performed and yielded an unacceptable recovery for lead (75%). The serial dilution recovery was acceptable; therefore, the matrix test passed for the sample matrix.


The WG1192853-4 Laboratory Duplicate RPD for zinc (28%), performed on L1852610-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

Cyanide, Total

The WG1192409-2/-3 LCS/LCSD recoveries (71%/77%), associated with L1852610-01 through -03, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 01/03/19

ORGANICS

VOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 12/28/18 10:58
 Analyst: MKS
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.0	3.2	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.1	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.32	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.37	1
Tetrachloroethene	ND		ug/kg	0.70	0.27	1
Chlorobenzene	ND		ug/kg	0.70	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.6	0.97	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.36	1
1,1,1-Trichloroethane	ND		ug/kg	0.70	0.23	1
Bromodichloromethane	ND		ug/kg	0.70	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.38	1
cis-1,3-Dichloropropene	ND		ug/kg	0.70	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.70	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.70	0.22	1
Bromoform	ND		ug/kg	5.6	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.70	0.23	1
Benzene	ND		ug/kg	0.70	0.23	1
Toluene	ND		ug/kg	1.4	0.76	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.6	1.3	1
Bromomethane	ND		ug/kg	2.8	0.81	1
Vinyl chloride	ND		ug/kg	1.4	0.47	1
Chloroethane	ND		ug/kg	2.8	0.63	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.19	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-01

Date Collected: 12/20/18 12:10

Client ID: RB07_0-2

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.70	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.28	1
p/m-Xylene	ND		ug/kg	2.8	0.78	1
o-Xylene	ND		ug/kg	1.4	0.41	1
Xylenes, Total	ND		ug/kg	1.4	0.41	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.8	0.33	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	ND		ug/kg	14	6.7	1
Carbon disulfide	ND		ug/kg	14	6.4	1
2-Butanone	ND		ug/kg	14	3.1	1
Vinyl acetate	ND		ug/kg	14	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	0.18	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.8	0.29	1
2,2-Dichloropropane	ND		ug/kg	2.8	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.39	1
1,3-Dichloropropane	ND		ug/kg	2.8	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.70	0.18	1
Bromobenzene	ND		ug/kg	2.8	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.8	0.16	1
o-Chlorotoluene	ND		ug/kg	2.8	0.27	1
p-Chlorotoluene	ND		ug/kg	2.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.6	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.6	0.91	1
Acrylonitrile	ND		ug/kg	5.6	1.6	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.45	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.38	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.27	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	0.47	1
1,4-Dioxane	ND		ug/kg	140	49.	1
p-Diethylbenzene	ND		ug/kg	2.8	0.25	1
p-Ethyltoluene	ND		ug/kg	2.8	0.54	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.8	0.27	1
Ethyl ether	ND		ug/kg	2.8	0.48	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.0	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 12/28/18 11:24
 Analyst: MKS
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.5	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.90	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.90	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.90	0.11	1
Dibromochloromethane	ND		ug/kg	0.90	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.90	0.24	1
Tetrachloroethene	ND		ug/kg	0.45	0.18	1
Chlorobenzene	ND		ug/kg	0.45	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.62	1
1,2-Dichloroethane	ND		ug/kg	0.90	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.45	0.15	1
Bromodichloromethane	ND		ug/kg	0.45	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.45	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.45	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.45	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.45	0.15	1
Benzene	0.87		ug/kg	0.45	0.15	1
Toluene	0.59	J	ug/kg	0.90	0.49	1
Ethylbenzene	ND		ug/kg	0.90	0.13	1
Chloromethane	ND		ug/kg	3.6	0.84	1
Bromomethane	ND		ug/kg	1.8	0.52	1
Vinyl chloride	ND		ug/kg	0.90	0.30	1
Chloroethane	ND		ug/kg	1.8	0.41	1
1,1-Dichloroethene	ND		ug/kg	0.90	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.12	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
Client ID: RB07_8-10
Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
Date Received: 12/20/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.45	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.50	1
o-Xylene	ND		ug/kg	0.90	0.26	1
Xylenes, Total	ND		ug/kg	0.90	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.90	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.90	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.21	1
Styrene	ND		ug/kg	0.90	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.0	0.82	1
Acetone	ND		ug/kg	9.0	4.3	1
Carbon disulfide	ND		ug/kg	9.0	4.1	1
2-Butanone	ND		ug/kg	9.0	2.0	1
Vinyl acetate	ND		ug/kg	9.0	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	9.0	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.11	1
2-Hexanone	ND		ug/kg	9.0	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.90	0.25	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.45	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.90	0.15	1
sec-Butylbenzene	ND		ug/kg	0.90	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.90	1
Hexachlorobutadiene	ND		ug/kg	3.6	0.15	1
Isopropylbenzene	ND		ug/kg	0.90	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.90	0.10	1
Naphthalene	ND		ug/kg	3.6	0.58	1
Acrylonitrile	ND		ug/kg	3.6	1.0	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.90	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1
1,4-Dioxane	ND		ug/kg	90	32.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.34	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.5	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	93		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 12/28/18 11:50
 Analyst: MKS
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.26	1
Tetrachloroethene	ND		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.69	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.16	1
Benzene	0.40	J	ug/kg	0.50	0.16	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.93	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.33	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-03

Date Collected: 12/20/18 13:45

Client ID: RB07_10-12

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.91	1
Acetone	19		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.5	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	0.99	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.1	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	100	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/28/18 09:15
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03 Batch: WG1193693-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.95	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 12/28/18 09:15
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03 Batch: WG1193693-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 12/28/18 09:15
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03 Batch: WG1193693-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	92		70-130



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1193693-3 WG1193693-4								
Methylene chloride	91		83		70-130	9		30
1,1-Dichloroethane	97		92		70-130	5		30
Chloroform	84		79		70-130	6		30
Carbon tetrachloride	95		88		70-130	8		30
1,2-Dichloropropane	98		92		70-130	6		30
Dibromochloromethane	95		94		70-130	1		30
1,1,2-Trichloroethane	88		86		70-130	2		30
Tetrachloroethene	96		91		70-130	5		30
Chlorobenzene	90		85		70-130	6		30
Trichlorofluoromethane	94		85		70-139	10		30
1,2-Dichloroethane	93		89		70-130	4		30
1,1,1-Trichloroethane	93		87		70-130	7		30
Bromodichloromethane	84		82		70-130	2		30
trans-1,3-Dichloropropene	91		89		70-130	2		30
cis-1,3-Dichloropropene	86		83		70-130	4		30
1,1-Dichloropropene	88		83		70-130	6		30
Bromoform	94		92		70-130	2		30
1,1,2,2-Tetrachloroethane	86		86		70-130	0		30
Benzene	84		78		70-130	7		30
Toluene	88		83		70-130	6		30
Ethylbenzene	88		83		70-130	6		30
Chloromethane	134	Q	127		52-130	5		30
Bromomethane	158	Q	153	Q	57-147	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1193693-3 WG1193693-4								
Vinyl chloride	129		118		67-130	9		30
Chloroethane	109		102		50-151	7		30
1,1-Dichloroethene	93		90		65-135	3		30
trans-1,2-Dichloroethene	94		86		70-130	9		30
Trichloroethene	88		82		70-130	7		30
1,2-Dichlorobenzene	90		85		70-130	6		30
1,3-Dichlorobenzene	90		86		70-130	5		30
1,4-Dichlorobenzene	92		85		70-130	8		30
Methyl tert butyl ether	89		85		66-130	5		30
p/m-Xylene	89		84		70-130	6		30
o-Xylene	89		84		70-130	6		30
cis-1,2-Dichloroethene	90		86		70-130	5		30
Dibromomethane	88		85		70-130	3		30
Styrene	86		83		70-130	4		30
Dichlorodifluoromethane	138		129		30-146	7		30
Acetone	90		96		54-140	6		30
Carbon disulfide	80		76		59-130	5		30
2-Butanone	82		94		70-130	14		30
Vinyl acetate	101		105		70-130	4		30
4-Methyl-2-pentanone	102		111		70-130	8		30
1,2,3-Trichloropropane	84		83		68-130	1		30
2-Hexanone	87		95		70-130	9		30
Bromochloromethane	96		95		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1193693-3 WG1193693-4								
2,2-Dichloropropane	89		84		70-130	6		30
1,2-Dibromoethane	93		94		70-130	1		30
1,3-Dichloropropane	87		86		69-130	1		30
1,1,1,2-Tetrachloroethane	97		93		70-130	4		30
Bromobenzene	90		83		70-130	8		30
n-Butylbenzene	89		82		70-130	8		30
sec-Butylbenzene	85		79		70-130	7		30
tert-Butylbenzene	92		84		70-130	9		30
o-Chlorotoluene	85		79		70-130	7		30
p-Chlorotoluene	87		80		70-130	8		30
1,2-Dibromo-3-chloropropane	94		95		68-130	1		30
Hexachlorobutadiene	88		81		67-130	8		30
Isopropylbenzene	84		78		70-130	7		30
p-Isopropyltoluene	93		86		70-130	8		30
Naphthalene	92		91		70-130	1		30
Acrylonitrile	110		113		70-130	3		30
n-Propylbenzene	86		79		70-130	8		30
1,2,3-Trichlorobenzene	88		84		70-130	5		30
1,2,4-Trichlorobenzene	91		85		70-130	7		30
1,3,5-Trimethylbenzene	86		79		70-130	8		30
1,2,4-Trimethylbenzene	86		80		70-130	7		30
1,4-Dioxane	103		105		65-136	2		30
p-Diethylbenzene	92		85		70-130	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03 Batch: WG1193693-3 WG1193693-4								
p-Ethyltoluene	84		78		70-130	7		30
1,2,4,5-Tetramethylbenzene	88		83		70-130	6		30
Ethyl ether	94		91		67-130	3		30
trans-1,4-Dichloro-2-butene	101		98		70-130	3		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	101		101		70-130
Toluene-d8	102		103		70-130
4-Bromofluorobenzene	98		97		70-130
Dibromofluoromethane	96		93		70-130

SEMIVOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 01:25
 Analyst: ALS
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/02/19 14:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1300		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	64	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	64.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	63.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-01

Date Collected: 12/20/18 12:10

Client ID: RB07_0-2

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	760		ug/kg	110	21.	1
Benzo(a)pyrene	810		ug/kg	150	46.	1
Benzo(b)fluoranthene	1100		ug/kg	110	31.	1
Benzo(k)fluoranthene	430		ug/kg	110	30.	1
Chrysene	840		ug/kg	110	19.	1
Acenaphthylene	460		ug/kg	150	29.	1
Anthracene	180		ug/kg	110	36.	1
Benzo(ghi)perylene	750		ug/kg	150	22.	1
Fluorene	23	J	ug/kg	190	18.	1
Phenanthrene	320		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	150		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	710		ug/kg	150	26.	1
Pyrene	1200		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	22	J	ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	19.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	65	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	73		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 01:01
 Analyst: ALS
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/02/19 14:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	1900		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	120	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	850		ug/kg	110	21.	1
Benzo(a)pyrene	760		ug/kg	150	46.	1
Benzo(b)fluoranthene	940		ug/kg	110	32.	1
Benzo(k)fluoranthene	350		ug/kg	110	30.	1
Chrysene	790		ug/kg	110	20.	1
Acenaphthylene	95	J	ug/kg	150	29.	1
Anthracene	440		ug/kg	110	37.	1
Benzo(ghi)perylene	500		ug/kg	150	22.	1
Fluorene	150	J	ug/kg	190	18.	1
Phenanthrene	1500		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	110		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	530		ug/kg	150	26.	1
Pyrene	1700		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	100	J	ug/kg	190	18.	1
2-Methylnaphthalene	120	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	110	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	46		10-136
4-Terphenyl-d14	72		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/27/18 23:32
 Analyst: ALS
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	26	J	ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	520		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	33	J	ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-03

Date Collected: 12/20/18 13:45

Client ID: RB07_10-12

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	290		ug/kg	120	23.	1
Benzo(a)pyrene	290		ug/kg	160	49.	1
Benzo(b)fluoranthene	370		ug/kg	120	34.	1
Benzo(k)fluoranthene	130		ug/kg	120	32.	1
Chrysene	270		ug/kg	120	21.	1
Acenaphthylene	34	J	ug/kg	160	31.	1
Anthracene	71	J	ug/kg	120	39.	1
Benzo(ghi)perylene	220		ug/kg	160	24.	1
Fluorene	26	J	ug/kg	200	20.	1
Phenanthrene	330		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	48	J	ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	220		ug/kg	160	28.	1
Pyrene	460		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	21	J	ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	67.	1
2-Nitrophenol	ND		ug/kg	440	76.	1
4-Nitrophenol	ND		ug/kg	280	82.	1
2,4-Dinitrophenol	ND		ug/kg	970	94.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	97.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	32.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	39.	1
Benzoic Acid	ND		ug/kg	660	200	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	34	J	ug/kg	200	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	79		10-136
4-Terphenyl-d14	76		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/26/18 23:10
 Analyst: JG

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1192476-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/26/18 23:10
 Analyst: JG

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1192476-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 12/26/18 23:10
 Analyst: JG

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 00:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1192476-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	100		10-136
4-Terphenyl-d14	82		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/02/19 13:45
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 01/02/19 10:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1193985-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.
Hexachlorobenzene	ND		ug/kg	100	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	170	16.
1,2-Dichlorobenzene	ND		ug/kg	170	30.
1,3-Dichlorobenzene	ND		ug/kg	170	28.
1,4-Dichlorobenzene	ND		ug/kg	170	29.
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.
2,4-Dinitrotoluene	ND		ug/kg	170	33.
2,6-Dinitrotoluene	ND		ug/kg	170	28.
Fluoranthene	ND		ug/kg	100	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.
4-Bromophenyl phenyl ether	ND		ug/kg	170	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	170	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	170	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	57.
Butyl benzyl phthalate	ND		ug/kg	170	42.
Di-n-butylphthalate	ND		ug/kg	170	31.
Di-n-octylphthalate	ND		ug/kg	170	56.
Diethyl phthalate	ND		ug/kg	170	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/02/19 13:45
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 01/02/19 10:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1193985-1					
Dimethyl phthalate	ND		ug/kg	170	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	170	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	170	30.
2-Nitroaniline	ND		ug/kg	170	32.
3-Nitroaniline	ND		ug/kg	170	31.
4-Nitroaniline	ND		ug/kg	170	69.
Dibenzofuran	ND		ug/kg	170	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	17.
Acetophenone	ND		ug/kg	170	20.
2,4,6-Trichlorophenol	ND		ug/kg	100	31.
p-Chloro-m-cresol	ND		ug/kg	170	25.
2-Chlorophenol	ND		ug/kg	170	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	170	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 01/02/19 13:45
 Analyst: EK

Extraction Method: EPA 3546
 Extraction Date: 01/02/19 10:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1193985-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	170	25.
2-Methylphenol	ND		ug/kg	170	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	170	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	170	51.
Carbazole	ND		ug/kg	170	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	94		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	93		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1192476-2 WG1192476-3								
Acenaphthene	74		80		31-137	8		50
1,2,4-Trichlorobenzene	69		72		38-107	4		50
Hexachlorobenzene	80		85		40-140	6		50
Bis(2-chloroethyl)ether	68		70		40-140	3		50
2-Chloronaphthalene	74		79		40-140	7		50
1,2-Dichlorobenzene	65		67		40-140	3		50
1,3-Dichlorobenzene	65		66		40-140	2		50
1,4-Dichlorobenzene	64		66		28-104	3		50
3,3'-Dichlorobenzidine	58		59		40-140	2		50
2,4-Dinitrotoluene	88		93		40-132	6		50
2,6-Dinitrotoluene	86		90		40-140	5		50
Fluoranthene	78		84		40-140	7		50
4-Chlorophenyl phenyl ether	72		77		40-140	7		50
4-Bromophenyl phenyl ether	74		81		40-140	9		50
Bis(2-chloroisopropyl)ether	62		65		40-140	5		50
Bis(2-chloroethoxy)methane	73		77		40-117	5		50
Hexachlorobutadiene	67		70		40-140	4		50
Hexachlorocyclopentadiene	56		58		40-140	4		50
Hexachloroethane	70		72		40-140	3		50
Isophorone	79		83		40-140	5		50
Naphthalene	69		72		40-140	4		50
Nitrobenzene	72		74		40-140	3		50
NDPA/DPA	78		83		36-157	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1192476-2 WG1192476-3								
n-Nitrosodi-n-propylamine	74		79		32-121	7		50
Bis(2-ethylhexyl)phthalate	81		86		40-140	6		50
Butyl benzyl phthalate	88		95		40-140	8		50
Di-n-butylphthalate	89		95		40-140	7		50
Di-n-octylphthalate	84		90		40-140	7		50
Diethyl phthalate	82		88		40-140	7		50
Dimethyl phthalate	81		85		40-140	5		50
Benzo(a)anthracene	72		78		40-140	8		50
Benzo(a)pyrene	82		93		40-140	13		50
Benzo(b)fluoranthene	84		90		40-140	7		50
Benzo(k)fluoranthene	80		91		40-140	13		50
Chrysene	77		82		40-140	6		50
Acenaphthylene	79		84		40-140	6		50
Anthracene	78		85		40-140	9		50
Benzo(ghi)perylene	78		88		40-140	12		50
Fluorene	78		83		40-140	6		50
Phenanthrene	72		78		40-140	8		50
Dibenzo(a,h)anthracene	77		87		40-140	12		50
Indeno(1,2,3-cd)pyrene	78		84		40-140	7		50
Pyrene	77		83		35-142	8		50
Biphenyl	78		83		54-104	6		50
4-Chloroaniline	72		75		40-140	4		50
2-Nitroaniline	84		89		47-134	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1192476-2 WG1192476-3								
3-Nitroaniline	55		58		26-129	5		50
4-Nitroaniline	75		80		41-125	6		50
Dibenzofuran	74		80		40-140	8		50
2-Methylnaphthalene	71		75		40-140	5		50
1,2,4,5-Tetrachlorobenzene	75		79		40-117	5		50
Acetophenone	78		82		14-144	5		50
2,4,6-Trichlorophenol	81		86		30-130	6		50
p-Chloro-m-cresol	82		88		26-103	7		50
2-Chlorophenol	73		76		25-102	4		50
2,4-Dichlorophenol	78		82		30-130	5		50
2,4-Dimethylphenol	80		84		30-130	5		50
2-Nitrophenol	78		80		30-130	3		50
4-Nitrophenol	79		84		11-114	6		50
2,4-Dinitrophenol	80		79		4-130	1		50
4,6-Dinitro-o-cresol	82		85		10-130	4		50
Pentachlorophenol	65		67		17-109	3		50
Phenol	66		69		26-90	4		50
2-Methylphenol	75		78		30-130.	4		50
3-Methylphenol/4-Methylphenol	79		84		30-130	6		50
2,4,5-Trichlorophenol	81		84		30-130	4		50
Benzoic Acid	27		53		10-110	65	Q	50
Benzyl Alcohol	78		82		40-140	5		50
Carbazole	77		84		54-128	9		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1192476-2 WG1192476-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	75		77		25-120
Phenol-d6	80		83		10-120
Nitrobenzene-d5	80		83		23-120
2-Fluorobiphenyl	81		84		30-120
2,4,6-Tribromophenol	101		106		10-136
4-Terphenyl-d14	77		82		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1193985-2 WG1193985-3								
Acenaphthene	67		67		31-137	0		50
1,2,4-Trichlorobenzene	79		79		38-107	0		50
Hexachlorobenzene	84		81		40-140	4		50
Bis(2-chloroethyl)ether	69		69		40-140	0		50
2-Chloronaphthalene	82		83		40-140	1		50
1,2-Dichlorobenzene	71		71		40-140	0		50
1,3-Dichlorobenzene	68		69		40-140	1		50
1,4-Dichlorobenzene	70		70		28-104	0		50
3,3'-Dichlorobenzidine	68		71		40-140	4		50
2,4-Dinitrotoluene	70		69		40-132	1		50
2,6-Dinitrotoluene	84		81		40-140	4		50
Fluoranthene	82		82		40-140	0		50
4-Chlorophenyl phenyl ether	73		72		40-140	1		50
4-Bromophenyl phenyl ether	79		77		40-140	3		50
Bis(2-chloroisopropyl)ether	68		68		40-140	0		50
Bis(2-chloroethoxy)methane	73		73		40-117	0		50
Hexachlorobutadiene	81		79		40-140	3		50
Hexachlorocyclopentadiene	43		47		40-140	9		50
Hexachloroethane	65		64		40-140	2		50
Isophorone	74		75		40-140	1		50
Naphthalene	75		75		40-140	0		50
Nitrobenzene	71		70		40-140	1		50
NDPA/DPA	73		73		36-157	0		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1193985-2 WG1193985-3								
n-Nitrosodi-n-propylamine	72		72		32-121	0		50
Bis(2-ethylhexyl)phthalate	78		77		40-140	1		50
Butyl benzyl phthalate	79		78		40-140	1		50
Di-n-butylphthalate	82		81		40-140	1		50
Di-n-octylphthalate	77		76		40-140	1		50
Diethyl phthalate	69		68		40-140	1		50
Dimethyl phthalate	85		83		40-140	2		50
Benzo(a)anthracene	77		75		40-140	3		50
Benzo(a)pyrene	78		78		40-140	0		50
Benzo(b)fluoranthene	76		77		40-140	1		50
Benzo(k)fluoranthene	82		81		40-140	1		50
Chrysene	78		79		40-140	1		50
Acenaphthylene	86		85		40-140	1		50
Anthracene	82		81		40-140	1		50
Benzo(ghi)perylene	76		76		40-140	0		50
Fluorene	74		74		40-140	0		50
Phenanthrene	78		77		40-140	1		50
Dibenzo(a,h)anthracene	77		76		40-140	1		50
Indeno(1,2,3-cd)pyrene	76		75		40-140	1		50
Pyrene	83		82		35-142	1		50
Biphenyl	83		82		54-104	1		50
4-Chloroaniline	35	Q	44		40-140	23		50
2-Nitroaniline	85		85		47-134	0		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1193985-2 WG1193985-3								
3-Nitroaniline	47		52		26-129	10		50
4-Nitroaniline	57		57		41-125	0		50
Dibenzofuran	71		70		40-140	1		50
2-Methylnaphthalene	78		79		40-140	1		50
1,2,4,5-Tetrachlorobenzene	86		86		40-117	0		50
Acetophenone	74		73		14-144	1		50
2,4,6-Trichlorophenol	90		87		30-130	3		50
p-Chloro-m-cresol	84		84		26-103	0		50
2-Chlorophenol	77		76		25-102	1		50
2,4-Dichlorophenol	85		84		30-130	1		50
2,4-Dimethylphenol	83		83		30-130	0		50
2-Nitrophenol	76		76		30-130	0		50
4-Nitrophenol	71		68		11-114	4		50
2,4-Dinitrophenol	41		40		4-130	2		50
4,6-Dinitro-o-cresol	47		48		10-130	2		50
Pentachlorophenol	82		80		17-109	2		50
Phenol	73		74		26-90	1		50
2-Methylphenol	76		76		30-130.	0		50
3-Methylphenol/4-Methylphenol	76		77		30-130	1		50
2,4,5-Trichlorophenol	95		92		30-130	3		50
Benzoic Acid	62		63		10-110	2		50
Benzyl Alcohol	77		79		40-140	3		50
Carbazole	79		78		54-128	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1193985-2 WG1193985-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	71		71		25-120
Phenol-d6	74		76		10-120
Nitrobenzene-d5	71		72		23-120
2-Fluorobiphenyl	82		82		30-120
2,4,6-Tribromophenol	84		85		10-136
4-Terphenyl-d14	83		82		18-120

PCBS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/27/18 16:21
 Analyst: WR
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 18:47
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/26/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/26/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	3.24	1	A
Aroclor 1221	ND		ug/kg	36.4	3.65	1	A
Aroclor 1232	ND		ug/kg	36.4	7.73	1	A
Aroclor 1242	ND		ug/kg	36.4	4.91	1	A
Aroclor 1248	ND		ug/kg	36.4	5.47	1	A
Aroclor 1254	ND		ug/kg	36.4	3.99	1	A
Aroclor 1260	35.9	J	ug/kg	36.4	6.73	1	B
Aroclor 1262	ND		ug/kg	36.4	4.63	1	A
Aroclor 1268	ND		ug/kg	36.4	3.78	1	A
PCBs, Total	35.9	J	ug/kg	36.4	3.24	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/27/18 16:34
 Analyst: WR
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 18:47
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/26/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/26/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.6	3.25	1	A
Aroclor 1221	ND		ug/kg	36.6	3.67	1	A
Aroclor 1232	ND		ug/kg	36.6	7.76	1	A
Aroclor 1242	ND		ug/kg	36.6	4.94	1	A
Aroclor 1248	ND		ug/kg	36.6	5.49	1	A
Aroclor 1254	ND		ug/kg	36.6	4.01	1	A
Aroclor 1260	8.65	J	ug/kg	36.6	6.77	1	A
Aroclor 1262	ND		ug/kg	36.6	4.65	1	A
Aroclor 1268	ND		ug/kg	36.6	3.79	1	A
PCBs, Total	8.65	J	ug/kg	36.6	3.25	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/27/18 16:47
 Analyst: WR
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 18:47
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/26/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/26/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.6	3.43	1	A
Aroclor 1221	ND		ug/kg	38.6	3.87	1	A
Aroclor 1232	ND		ug/kg	38.6	8.19	1	A
Aroclor 1242	ND		ug/kg	38.6	5.21	1	A
Aroclor 1248	ND		ug/kg	38.6	5.79	1	A
Aroclor 1254	ND		ug/kg	38.6	4.22	1	A
Aroclor 1260	ND		ug/kg	38.6	7.14	1	A
Aroclor 1262	ND		ug/kg	38.6	4.90	1	A
Aroclor 1268	ND		ug/kg	38.6	4.00	1	A
PCBs, Total	ND		ug/kg	38.6	3.43	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 12/27/18 15:42
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 12/23/18 18:47
Cleanup Method: EPA 3665A
Cleanup Date: 12/26/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/26/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-03 Batch: WG1192574-1						
Aroclor 1016	ND		ug/kg	32.5	2.88	A
Aroclor 1221	ND		ug/kg	32.5	3.26	A
Aroclor 1232	ND		ug/kg	32.5	6.89	A
Aroclor 1242	ND		ug/kg	32.5	4.38	A
Aroclor 1248	ND		ug/kg	32.5	4.87	A
Aroclor 1254	ND		ug/kg	32.5	3.55	A
Aroclor 1260	ND		ug/kg	32.5	6.00	A
Aroclor 1262	ND		ug/kg	32.5	4.13	A
Aroclor 1268	ND		ug/kg	32.5	3.36	A
PCBs, Total	ND		ug/kg	32.5	2.88	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	75		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1192574-2 WG1192574-3									
Aroclor 1016	58		64		40-140	10		50	A
Aroclor 1260	48		50		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		70		30-150	A
Decachlorobiphenyl	61		61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		76		30-150	B
Decachlorobiphenyl	69		68		30-150	B

PESTICIDES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 11:45
 Analyst: SL
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 17:18
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.338	1	A
Lindane	ND		ug/kg	0.720	0.322	1	A
Alpha-BHC	ND		ug/kg	0.720	0.204	1	A
Beta-BHC	ND		ug/kg	1.73	0.655	1	A
Heptachlor	ND		ug/kg	0.863	0.387	1	A
Aldrin	ND		ug/kg	1.73	0.608	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.971	1	A
Endrin	ND		ug/kg	0.720	0.295	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.756	1	A
Endrin ketone	ND		ug/kg	1.73	0.445	1	A
Dieldrin	1.57	IP	ug/kg	1.08	0.540	1	B
4,4'-DDE	12.9		ug/kg	1.73	0.399	1	A
4,4'-DDD	0.913	J	ug/kg	1.73	0.616	1	A
4,4'-DDT	26.9		ug/kg	3.24	1.39	1	B
Endosulfan I	ND		ug/kg	1.73	0.408	1	A
Endosulfan II	ND	I	ug/kg	1.73	0.577	1	A
Endosulfan sulfate	0.392	JIP	ug/kg	0.720	0.342	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.07	1	A
cis-Chlordane	5.02	P	ug/kg	2.16	0.602	1	A
trans-Chlordane	5.13	P	ug/kg	2.16	0.570	1	A
Chlordane	ND		ug/kg	14.0	5.72	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	90		30-150	B
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	62		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01
 Client ID: RB07_0-2
 Sample Location: BRONX, NY

Date Collected: 12/20/18 12:10
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/23/18 14:18
 Analyst: KEG
 Percent Solids: 89%
 Methylation Date: 12/22/18 21:00

Extraction Method: EPA 8151A
 Extraction Date: 12/22/18 02:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	185	11.7	1	B
2,4,5-T	ND		ug/kg	185	5.74	1	B
2,4,5-TP (Silvex)	ND		ug/kg	185	4.92	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 11:58
 Analyst: SL
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 17:18
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.80	0.352	1	A
Lindane	ND		ug/kg	0.749	0.335	1	A
Alpha-BHC	ND		ug/kg	0.749	0.213	1	A
Beta-BHC	ND		ug/kg	1.80	0.682	1	A
Heptachlor	ND		ug/kg	0.899	0.403	1	A
Aldrin	ND		ug/kg	1.80	0.633	1	A
Heptachlor epoxide	ND		ug/kg	3.37	1.01	1	A
Endrin	ND		ug/kg	0.749	0.307	1	A
Endrin aldehyde	ND		ug/kg	2.25	0.786	1	A
Endrin ketone	ND		ug/kg	1.80	0.463	1	A
Dieldrin	ND		ug/kg	1.12	0.562	1	A
4,4'-DDE	6.67		ug/kg	1.80	0.416	1	A
4,4'-DDD	ND	IP	ug/kg	1.80	0.641	1	B
4,4'-DDT	16.6		ug/kg	3.37	1.44	1	A
Endosulfan I	ND		ug/kg	1.80	0.425	1	A
Endosulfan II	ND		ug/kg	1.80	0.601	1	A
Endosulfan sulfate	1.20		ug/kg	0.749	0.356	1	A
Methoxychlor	ND		ug/kg	3.37	1.05	1	A
Toxaphene	ND		ug/kg	33.7	9.44	1	A
cis-Chlordane	1.05	JIP	ug/kg	2.25	0.626	1	B
trans-Chlordane	1.29	JIP	ug/kg	2.25	0.593	1	B
Chlordane	ND		ug/kg	14.6	5.96	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	98		30-150	B
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	66		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-02
 Client ID: RB07_8-10
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:30
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/23/18 14:37
 Analyst: KEG
 Percent Solids: 86%
 Methylation Date: 12/22/18 21:00

Extraction Method: EPA 8151A
 Extraction Date: 12/22/18 02:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	190	12.0	1	B
2,4,5-T	ND		ug/kg	190	5.89	1	B
2,4,5-TP (Silvex)	ND		ug/kg	190	5.05	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	102		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 12:10
 Analyst: SL
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 17:18
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.93	0.378	1	A
Lindane	ND		ug/kg	0.805	0.360	1	A
Alpha-BHC	ND		ug/kg	0.805	0.229	1	A
Beta-BHC	ND		ug/kg	1.93	0.733	1	A
Heptachlor	ND		ug/kg	0.966	0.433	1	A
Aldrin	ND		ug/kg	1.93	0.680	1	A
Heptachlor epoxide	ND		ug/kg	3.62	1.09	1	A
Endrin	ND		ug/kg	0.805	0.330	1	A
Endrin aldehyde	ND		ug/kg	2.42	0.846	1	A
Endrin ketone	ND		ug/kg	1.93	0.498	1	A
Dieldrin	ND		ug/kg	1.21	0.604	1	A
4,4'-DDE	3.02	P	ug/kg	1.93	0.447	1	A
4,4'-DDD	1.30	JP	ug/kg	1.93	0.689	1	A
4,4'-DDT	4.26	P	ug/kg	3.62	1.55	1	A
Endosulfan I	ND		ug/kg	1.93	0.457	1	A
Endosulfan II	ND		ug/kg	1.93	0.646	1	A
Endosulfan sulfate	0.772	J	ug/kg	0.805	0.383	1	A
Methoxychlor	ND		ug/kg	3.62	1.13	1	A
Toxaphene	ND		ug/kg	36.2	10.1	1	A
cis-Chlordane	ND		ug/kg	2.42	0.673	1	A
trans-Chlordane	0.811	JIP	ug/kg	2.42	0.638	1	B
Chlordane	ND		ug/kg	15.7	6.40	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-03

Date Collected: 12/20/18 13:45

Client ID: RB07_10-12

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03
 Client ID: RB07_10-12
 Sample Location: BRONX, NY

Date Collected: 12/20/18 13:45
 Date Received: 12/20/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/23/18 14:56
 Analyst: KEG
 Percent Solids: 81%
 Methylation Date: 12/22/18 21:00

Extraction Method: EPA 8151A
 Extraction Date: 12/22/18 02:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	205	12.9	1	B
2,4,5-T	ND		ug/kg	205	6.36	1	B
2,4,5-TP (Silvex)	ND		ug/kg	205	5.45	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	105		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 12/23/18 12:44
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/22/18 02:15

Methylation Date: 12/22/18 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1192311-1						
2,4-D	ND		ug/kg	164	10.3	B
2,4,5-T	ND		ug/kg	164	5.07	B
2,4,5-TP (Silvex)	ND		ug/kg	164	4.35	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	79		30-150	A
DCAA	78		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/28/18 13:05
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 12/23/18 17:18
Cleanup Method: EPA 3620B
Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1192564-1						
Delta-BHC	ND		ug/kg	1.57	0.308	A
Lindane	ND		ug/kg	0.656	0.293	A
Alpha-BHC	ND		ug/kg	0.656	0.186	A
Beta-BHC	ND		ug/kg	1.57	0.597	A
Heptachlor	ND		ug/kg	0.787	0.353	A
Aldrin	ND		ug/kg	1.57	0.554	A
Heptachlor epoxide	ND		ug/kg	2.95	0.886	A
Endrin	ND		ug/kg	0.656	0.269	A
Endrin aldehyde	ND		ug/kg	1.97	0.689	A
Endrin ketone	ND		ug/kg	1.57	0.406	A
Dieldrin	ND		ug/kg	0.984	0.492	A
4,4'-DDE	ND		ug/kg	1.57	0.364	A
4,4'-DDD	ND		ug/kg	1.57	0.562	A
4,4'-DDT	ND		ug/kg	2.95	1.27	A
Endosulfan I	ND		ug/kg	1.57	0.372	A
Endosulfan II	ND		ug/kg	1.57	0.526	A
Endosulfan sulfate	ND		ug/kg	0.656	0.312	A
Methoxychlor	ND		ug/kg	2.95	0.919	A
Toxaphene	ND		ug/kg	29.5	8.27	A
cis-Chlordane	ND		ug/kg	1.97	0.548	A
trans-Chlordane	ND		ug/kg	1.97	0.520	A
Chlordane	ND		ug/kg	12.8	5.22	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 12/28/18 13:05
 Analyst: KEG

Extraction Method: EPA 3546
 Extraction Date: 12/23/18 17:18
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1192564-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	77		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1192311-2 WG1192311-3									
2,4-D	87		96		30-150	10		30	B
2,4,5-T	86		94		30-150	9		30	B
2,4,5-TP (Silvex)	81		88		30-150	8		30	B

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	89		102		30-150	A
DCAA	83		97		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits	Column
	%Recovery	Qual	%Recovery	Qual					
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1192564-2 WG1192564-3									
Delta-BHC	85		81		30-150	5		30	A
Lindane	85		81		30-150	5		30	A
Alpha-BHC	88		84		30-150	5		30	A
Beta-BHC	77		77		30-150	0		30	A
Heptachlor	89		83		30-150	7		30	A
Aldrin	82		78		30-150	5		30	A
Heptachlor epoxide	88		84		30-150	5		30	A
Endrin	89		86		30-150	3		30	A
Endrin aldehyde	60		60		30-150	0		30	A
Endrin ketone	82		83		30-150	1		30	A
Dieldrin	93		91		30-150	2		30	A
4,4'-DDE	82		78		30-150	5		30	A
4,4'-DDD	86		83		30-150	4		30	A
4,4'-DDT	88		86		30-150	2		30	A
Endosulfan I	79		75		30-150	5		30	A
Endosulfan II	81		78		30-150	4		30	A
Endosulfan sulfate	64		64		30-150	0		30	A
Methoxychlor	90		89		30-150	1		30	A
cis-Chlordane	68		65		30-150	5		30	A
trans-Chlordane	51		57		30-150	11		30	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1192564-2 WG1192564-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	75		72		30-150	B
Decachlorobiphenyl	77		77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	69		66		30-150	A
Decachlorobiphenyl	80		80		30-150	A

METALS

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-01

Date Collected: 12/20/18 12:10

Client ID: RB07_0-2

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7260		mg/kg	8.88	2.40	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.44	0.337	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Arsenic, Total	3.39		mg/kg	0.888	0.185	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Barium, Total	468		mg/kg	0.888	0.154	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.444	0.029	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Cadmium, Total	0.506	J	mg/kg	0.888	0.087	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Calcium, Total	36500		mg/kg	8.88	3.11	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Chromium, Total	13.6		mg/kg	0.888	0.085	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Cobalt, Total	7.28		mg/kg	1.78	0.147	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Copper, Total	18.2		mg/kg	0.888	0.229	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Iron, Total	13000		mg/kg	4.44	0.802	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Lead, Total	164		mg/kg	4.44	0.238	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Magnesium, Total	6830		mg/kg	8.88	1.37	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Manganese, Total	301		mg/kg	0.888	0.141	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Mercury, Total	0.150		mg/kg	0.071	0.015	1	12/22/18 04:40	12/26/18 18:27	EPA 7471B	1,7471B	MG
Nickel, Total	14.2		mg/kg	2.22	0.215	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Potassium, Total	3120		mg/kg	222	12.8	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Selenium, Total	0.364	J	mg/kg	1.78	0.229	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.888	0.251	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Sodium, Total	323		mg/kg	178	2.80	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.78	0.280	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Vanadium, Total	23.2		mg/kg	0.888	0.180	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
Zinc, Total	221		mg/kg	4.44	0.260	2	12/26/18 20:30	12/28/18 21:57	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.90	0.90	1		12/28/18 21:57	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-02

Date Collected: 12/20/18 13:30

Client ID: RB07_8-10

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8070		mg/kg	8.71	2.35	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.35	0.331	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Arsenic, Total	4.87		mg/kg	0.871	0.181	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Barium, Total	456		mg/kg	0.871	0.152	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Beryllium, Total	0.174	J	mg/kg	0.435	0.029	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Cadmium, Total	1.21		mg/kg	0.871	0.085	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Calcium, Total	25200		mg/kg	8.71	3.05	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Chromium, Total	19.1		mg/kg	0.871	0.084	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Cobalt, Total	7.58		mg/kg	1.74	0.144	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Copper, Total	22.0		mg/kg	0.871	0.225	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Iron, Total	14000		mg/kg	4.35	0.786	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Lead, Total	94.0		mg/kg	4.35	0.233	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Magnesium, Total	11700		mg/kg	8.71	1.34	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Manganese, Total	392		mg/kg	0.871	0.138	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Mercury, Total	0.171		mg/kg	0.073	0.015	1	12/22/18 04:40	12/26/18 18:29	EPA 7471B	1,7471B	MG
Nickel, Total	37.0		mg/kg	2.18	0.211	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Potassium, Total	1440		mg/kg	218	12.5	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.74	0.225	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.871	0.246	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Sodium, Total	124	J	mg/kg	174	2.74	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.74	0.274	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Vanadium, Total	27.4		mg/kg	0.871	0.177	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
Zinc, Total	293		mg/kg	4.35	0.255	2	12/26/18 20:30	12/28/18 22:34	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	19		mg/kg	0.93	0.93	1		12/28/18 22:34	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-03

Date Collected: 12/20/18 13:45

Client ID: RB07_10-12

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3210		mg/kg	9.66	2.61	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Antimony, Total	0.425	J	mg/kg	4.83	0.367	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Arsenic, Total	7.24		mg/kg	0.966	0.201	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Barium, Total	340		mg/kg	0.966	0.168	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Beryllium, Total	0.135	J	mg/kg	0.483	0.032	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Cadmium, Total	1.59		mg/kg	0.966	0.095	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Calcium, Total	14300		mg/kg	9.66	3.38	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Chromium, Total	28.4		mg/kg	0.966	0.093	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Cobalt, Total	4.97		mg/kg	1.93	0.160	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Copper, Total	85.3		mg/kg	0.966	0.249	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Iron, Total	10300		mg/kg	4.83	0.872	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Lead, Total	282		mg/kg	4.83	0.259	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Magnesium, Total	2130		mg/kg	9.66	1.49	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Manganese, Total	128		mg/kg	0.966	0.154	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Mercury, Total	1.83		mg/kg	0.078	0.016	1	12/22/18 04:40	12/26/18 18:30	EPA 7471B	1,7471B	MG
Nickel, Total	23.6		mg/kg	2.42	0.234	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Potassium, Total	545		mg/kg	242	13.9	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Selenium, Total	10.9		mg/kg	1.93	0.249	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.966	0.273	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Sodium, Total	121	J	mg/kg	193	3.04	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.93	0.304	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Vanadium, Total	13.1		mg/kg	0.966	0.196	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
Zinc, Total	321		mg/kg	4.83	0.283	2	12/26/18 20:30	12/28/18 22:38	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	28		mg/kg	0.99	0.99	1		12/28/18 22:38	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1192315-1										
Mercury, Total	0.019	J	mg/kg	0.083	0.018	1	12/22/18 04:40	12/26/18 14:09	1,7471B	MG

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1192853-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Antimony, Total	ND		mg/kg	2.00	0.152	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Barium, Total	ND		mg/kg	0.400	0.070	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Calcium, Total	ND		mg/kg	4.00	1.40	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Chromium, Total	ND		mg/kg	0.400	0.038	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Copper, Total	ND		mg/kg	0.400	0.103	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Iron, Total	0.428	J	mg/kg	2.00	0.361	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Lead, Total	ND		mg/kg	2.00	0.107	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Manganese, Total	ND		mg/kg	0.400	0.064	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Nickel, Total	ND		mg/kg	1.00	0.097	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Potassium, Total	ND		mg/kg	100	5.76	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Selenium, Total	ND		mg/kg	0.800	0.103	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Silver, Total	ND		mg/kg	0.400	0.113	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Sodium, Total	ND		mg/kg	80.0	1.26	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Thallium, Total	ND		mg/kg	0.800	0.126	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC
Zinc, Total	ND		mg/kg	2.00	0.117	1	12/26/18 20:30	12/28/18 21:25	1,6010D	MC



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1192315-2 SRM Lot Number: D102-540								
Mercury, Total	95		-		65-134	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1192853-2 SRM Lot Number: D102-540					
Aluminum, Total	72	-	49-150	-	
Antimony, Total	148	-	1-199	-	
Arsenic, Total	100	-	83-117	-	
Barium, Total	96	-	83-118	-	
Beryllium, Total	96	-	83-116	-	
Cadmium, Total	94	-	83-118	-	
Calcium, Total	97	-	82-118	-	
Chromium, Total	94	-	83-117	-	
Cobalt, Total	94	-	84-116	-	
Copper, Total	91	-	84-116	-	
Iron, Total	97	-	61-139	-	
Lead, Total	95	-	82-118	-	
Magnesium, Total	83	-	76-124	-	
Manganese, Total	93	-	82-118	-	
Nickel, Total	94	-	83-117	-	
Potassium, Total	86	-	70-130	-	
Selenium, Total	96	-	79-121	-	
Silver, Total	96	-	80-120	-	
Sodium, Total	98	-	74-126	-	
Thallium, Total	95	-	81-119	-	
Vanadium, Total	93	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1192853-2 SRM Lot Number: D102-540					
Zinc, Total	93	-	81-118	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

<u>Parameter</u>	<u>Native Sample</u>	<u>MS Added</u>	<u>MS Found</u>	<u>MS %Recovery</u>	<u>Qual</u>	<u>MSD Found</u>	<u>MSD %Recovery</u>	<u>Qual</u>	<u>Recovery Limits</u>	<u>RPD</u>	<u>Qual</u>	<u>RPD Limits</u>
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192315-3 QC Sample: L1849633-01 Client ID: MS Sample												
Mercury, Total	ND	0.148	0.170	115		-	-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192853-3 QC Sample: L1852610-01 Client ID: RB07_0-2									
Aluminum, Total	7260	175	7400	80	-	-	75-125	-	20
Antimony, Total	ND	43.7	33.1	76	-	-	75-125	-	20
Arsenic, Total	3.39	10.5	13.8	99	-	-	75-125	-	20
Barium, Total	468	175	500	18	Q	-	75-125	-	20
Beryllium, Total	ND	4.37	4.04	92	-	-	75-125	-	20
Cadmium, Total	0.506J	4.46	4.57	102	-	-	75-125	-	20
Calcium, Total	36500	874	48600	1380	Q	-	75-125	-	20
Chromium, Total	13.6	17.5	29.7	92	-	-	75-125	-	20
Cobalt, Total	7.28	43.7	44.6	85	-	-	75-125	-	20
Copper, Total	18.2	21.8	35.8	80	-	-	75-125	-	20
Iron, Total	13000	87.4	13600	686	Q	-	75-125	-	20
Lead, Total	164	44.6	169	11	Q	-	75-125	-	20
Magnesium, Total	6830	874	7940	127	Q	-	75-125	-	20
Manganese, Total	301	43.7	384	190	Q	-	75-125	-	20
Nickel, Total	14.2	43.7	51.5	85	-	-	75-125	-	20
Potassium, Total	3120	874	4110	113	-	-	75-125	-	20
Selenium, Total	0.364J	10.5	9.79	93	-	-	75-125	-	20
Silver, Total	ND	26.2	26.7	102	-	-	75-125	-	20
Sodium, Total	323	874	1100	89	-	-	75-125	-	20
Thallium, Total	ND	10.5	8.17	78	-	-	75-125	-	20
Vanadium, Total	23.2	43.7	62.4	90	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192853-3 QC Sample: L1852610-01 Client ID: RB07_0-2									
Zinc, Total	221	43.7	255	78	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192315-4 QC Sample: L1849633-01 Client ID: DUP Sample						
Mercury, Total	ND	0.020J	mg/kg	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192853-4 QC Sample: L1852610-01 Client ID: RB07_0-2					
Aluminum, Total	7260	8010	mg/kg	10	20
Antimony, Total	ND	ND	mg/kg	NC	20
Arsenic, Total	3.39	3.95	mg/kg	15	20
Barium, Total	468	471	mg/kg	1	20
Beryllium, Total	ND	ND	mg/kg	NC	20
Cadmium, Total	0.506J	0.727J	mg/kg	NC	20
Calcium, Total	36500	38100	mg/kg	4	20
Chromium, Total	13.6	14.8	mg/kg	8	20
Cobalt, Total	7.28	7.97	mg/kg	9	20
Copper, Total	18.2	17.2	mg/kg	6	20
Iron, Total	13000	13300	mg/kg	2	20
Lead, Total	164	181	mg/kg	10	20
Magnesium, Total	6830	7090	mg/kg	4	20
Manganese, Total	301	292	mg/kg	3	20
Nickel, Total	14.2	15.1	mg/kg	6	20
Potassium, Total	3120	3660	mg/kg	16	20
Selenium, Total	0.364J	0.522J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	323	394	mg/kg	20	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1192853-4 QC Sample: L1852610-01 Client ID: RB07_0-2					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	23.2	24.1	mg/kg	4	20
Zinc, Total	221	293	mg/kg	28	Q 20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-01

Date Collected: 12/20/18 12:10

Client ID: RB07_0-2

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.8		%	0.100	NA	1	-	12/21/18 12:56	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/22/18 12:55	12/26/18 14:35	1,9010C/9012B	LH
Chromium, Hexavalent	1.54		mg/kg	0.901	0.180	1	12/22/18 23:30	12/26/18 21:15	1,7196A	CW



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**SAMPLE RESULTS**

Lab ID: L1852610-02

Date Collected: 12/20/18 13:30

Client ID: RB07_8-10

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	12/21/18 12:56	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/22/18 12:55	12/26/18 14:38	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.926	0.185	1	12/22/18 23:30	12/26/18 21:15	1,7196A	CW



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852610-03

Date Collected: 12/20/18 13:45

Client ID: RB07_10-12

Date Received: 12/20/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.0		%	0.100	NA	1	-	12/21/18 12:56	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/22/18 12:55	12/26/18 14:39	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.988	0.198	1	12/22/18 23:30	12/26/18 21:15	1,7196A	CW



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852610

Project Number: 170487001

Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1192409-1										
Cyanide, Total	ND		mg/kg	0.92	0.20	1	12/22/18 12:55	12/26/18 14:12	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1192485-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	12/22/18 23:30	12/26/18 21:15	1,7196A	CW

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1192409-2 WG1192409-3								
Cyanide, Total	71	Q	77	Q	80-120	6		35
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1192485-2								
Chromium, Hexavalent	83		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1192409-4 WG1192409-5 QC Sample: L1852610-01 Client ID: RB07_0-2												
Cyanide, Total	ND	10	8.4	82		10	90		75-125	17		35
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1192485-4 QC Sample: L1852610-01 Client ID: RB07_0-2												
Chromium, Hexavalent	1.54	751	783	104		-	-		75-125	-		20



Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852610

Report Date: 01/03/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1192128-1 QC Sample: L1852646-01 Client ID: DUP Sample						
Solids, Total	93.3	94.0	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1192485-6 QC Sample: L1852610-01 Client ID: RB07_0-2						
Chromium, Hexavalent	1.54	ND	mg/kg	NC		20

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852610-01A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1852610-01B	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-01C	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-01D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1852610-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852610-01F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-01G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-02A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1852610-02B	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-02C	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-02D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1852610-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852610-02F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-02G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-03A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852610**Project Number:** 170487001**Report Date:** 01/03/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852610-03B	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-03C	Vial water preserved	A	NA		2.4	Y	Absent	21-DEC-18 08:21	NYTCL-8260HLW(14)
L1852610-03D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1852610-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852610-03F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1852610-03G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Container Comments

L1852610-01A WM: sample broken 12/22/18 00:10 when being placed in custody fridge

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852610
Report Date: 01/03/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <p>NEW YORK CHAIN OF CUSTODY</p> <p>Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193</p> <p>Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288</p>	<p>Service Centers</p> <p>Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105</p>	<p>Page of </p>	<p>Date Rec'd in Lab 12/20/18</p>	<p>ALPHA Job # 11852610</p>																																																										
	<p>Project Information</p> <p>Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/></p>	<p>Deliverables</p> <p><input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other</p>	<p>Billing Information</p> <p><input checked="" type="checkbox"/> Same as Client Info PO #</p>																																																											
<p>Client Information</p> <p>Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com</p>	<p>Project Manager: Julia Leung ALPHAQuote #: 7013</p>	<p>Regulatory Requirement</p> <p><input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge</p>	<p>Disposal Site Information</p> <p>Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:</p>																																																											
<p>Turn-Around Time</p> <p>Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:</p>		<p>ANALYSIS</p> <table border="1"> <thead> <tr> <th>Part 375/TCL VOCs</th> <th>Part 375/TCL SVOCs</th> <th>Part 375/TCL PCBs</th> <th>Pesticides</th> <th>Herbicides</th> <th>TAL Metals</th> <th>Hex Chromium</th> </tr> </thead> <tbody> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> </tbody> </table>			Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																														
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<p>These samples have been previously analyzed by Alpha <input type="checkbox"/></p> <p>Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.</p>		<p>Sample Filtration</p> <p><input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)</p>			<p>T o t a l B o t t l e</p>																																																									
<table border="1"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">Part 375/TCL VOCs</th> <th rowspan="2">Part 375/TCL SVOCs</th> <th rowspan="2">Part 375/TCL PCBs</th> <th rowspan="2">Pesticides</th> <th rowspan="2">Herbicides</th> <th rowspan="2">TAL Metals</th> <th rowspan="2">Hex Chromium</th> <th rowspan="2">Sample Specific Comments</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>52610-01</td> <td>RB07_0-2</td> <td>12/20/18</td> <td>12:16 pm</td> <td>Soil</td> <td>JL</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> <tr> <td>-02</td> <td>RB07_8-10</td> <td>↓</td> <td>13:30</td> <td>↓</td> <td>JL</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> <tr> <td>-03</td> <td>RB07_10-12</td> <td>↓</td> <td>17:45</td> <td>↓</td> <td>JL</td> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> <td></td> </tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Sample Specific Comments	Date	Time	52610-01	RB07_0-2	12/20/18	12:16 pm	Soil	JL	X	X	X	X	X	X	X		-02	RB07_8-10	↓	13:30	↓	JL	X	X	X	X	X	X	X		-03	RB07_10-12	↓	17:45	↓	JL	X	X	X	X	X	X	X		<p>Container Type</p> <p>Preservative</p>		
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-02	RB07_8-10	↓	13:30	↓	JL	X	X	X	X	X	X	X																																																		
-03	RB07_10-12	↓	17:45	↓	JL	X	X	X	X	X	X	X																																																		
<p>Preservative Code: A = None B = HCl C = HNO₃ D = H₂SO₄ E = NaOH F = MeOH G = NaHSO₄ H = Na₂S₂O₃ K/E = Zn Ac/NaOH O = Other</p> <p>Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle</p>		<p>Westboro: Certification No: MA935 Mansfield: Certification No: MA015</p>		<p>Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)</p>																																																										
<p>Form No: 01-25 HC (rev. 30-Sept-2013)</p>		<p>Relinquished By: [Signature] Date/Time: 12-20-18 14:12</p>		<p>Received By: [Signature] Date/Time: 12-20-18 14:12</p>		<p>[Signature] Date/Time: 12/20/18 1900</p> <p>[Signature] Date/Time: 12/20/18 2325</p>																																																								



ANALYTICAL REPORT

Lab Number:	L1852926
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE + E. 146TH ST.
Project Number:	170487001
Report Date:	01/04/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1852926-01	RB05_0-2	SOIL	BRONX, NY	12/21/18 09:35	12/21/18
L1852926-02	RB05_8-10	SOIL	BRONX, NY	12/21/18 09:40	12/21/18
L1852926-03	RB05_13-15	SOIL	BRONX, NY	12/21/18 09:50	12/21/18
L1852926-04	RB05_19-21	SOIL	BRONX, NY	12/21/18 10:00	12/21/18
L1852926-05	RB06_0-2	SOIL	BRONX, NY	12/21/18 12:30	12/21/18
L1852926-06	RB06_8-10	SOIL	BRONX, NY	12/21/18 12:40	12/21/18
L1852926-07	RB06_10-12	SOIL	BRONX, NY	12/21/18 12:50	12/21/18
L1852926-08	RB04_0-2	SOIL	BRONX, NY	12/21/18 13:30	12/21/18
L1852926-09	RB04_8-10	SOIL	BRONX, NY	12/21/18 13:40	12/21/18
L1852926-10	RB04_13-15	SOIL	BRONX, NY	12/21/18 13:50	12/21/18
L1852926-11	SODUP01_122118	SOIL	BRONX, NY	12/21/18 00:00	12/21/18
L1852926-12	SOTB01_122118	WATER	BRONX, NY	12/21/18 00:00	12/21/18
L1852926-13	SOFB01_122118	WATER	BRONX, NY	12/21/18 14:45	12/21/18
L1852926-14	RB04_18-20	SOIL	BRONX, NY	12/21/18 14:00	12/21/18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Pesticides

L1852926-03, -04, -10, and -14: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1852926-03, -04, -10, and -14: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

L1852926-06: The sample has elevated detection limits due to limited sample volume available for analysis.

L1852926-13: The surrogate recoveries were outside the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (17%) and decachlorobiphenyl (13%); however, the criteria were achieved upon re-extraction outside of holding time. The results of both extractions are reported.

Herbicides

The surrogate recoveries for the WG1192478-1 Method Blank, associated with L1852926-01 through -11, and -14, are below the acceptance criteria for dcaa (0%). The associated samples are non-detect and have acceptable surrogate recoveries or surrogates that fail high; therefore, no further actions were taken.

Total Metals

L1852926-01 through -11 and -14: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1193229-3 MS recoveries for aluminum (23%), calcium (988%), iron (0%), lead (1700%), magnesium (72%), manganese (163%) and zinc (474%), performed on L1852926-01, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG1193229-3 MS recovery, performed on L1852926-01, is outside the acceptance criteria for barium (320%). A post digestion spike was performed and was within acceptance criteria.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Case Narrative (continued)

The WG1193229-4 Laboratory Duplicate RPD for iron (22%), performed on L1852926-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

Cyanide, Total

The WG1192428-2/-3 LCS/LCSD recoveries (73%/78%), associated with L1852926-01 through -08, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1192704-3 LCSD recovery (72%), associated with L1852926-09,-10,-11, and -14, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Hexavalent Chromium

The WG1192810-4 Insoluble MS recovery (0%), performed on L1852926-10, is below the acceptance criteria. The Soluble MS recovery (0%) was also below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 104%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/04/19

ORGANICS

VOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 08:38
 Analyst: JC
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.5	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	1.9		ug/kg	0.55	0.21	1
Chlorobenzene	ND		ug/kg	0.55	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.76	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.55	0.18	1
Bromodichloromethane	ND		ug/kg	0.55	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.55	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.55	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.55	0.17	1
Bromoform	ND		ug/kg	4.4	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.55	0.18	1
Benzene	ND		ug/kg	0.55	0.18	1
Toluene	ND		ug/kg	1.1	0.60	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.4	1.0	1
Bromomethane	ND		ug/kg	2.2	0.64	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
Chloroethane	ND		ug/kg	2.2	0.50	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.55	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.3	1
Carbon disulfide	ND		ug/kg	11	5.0	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.55	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.71	1
Acrylonitrile	ND		ug/kg	4.4	1.3	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.5	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 17:19
 Analyst: AD
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.7	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.94	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.94	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.94	0.12	1
Dibromochloromethane	ND		ug/kg	0.94	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.94	0.25	1
Tetrachloroethene	0.32	J	ug/kg	0.47	0.18	1
Chlorobenzene	ND		ug/kg	0.47	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.65	1
1,2-Dichloroethane	ND		ug/kg	0.94	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.47	0.16	1
Bromodichloromethane	ND		ug/kg	0.47	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.94	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.47	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.47	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.47	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.47	0.16	1
Benzene	0.17	J	ug/kg	0.47	0.16	1
Toluene	ND		ug/kg	0.94	0.51	1
Ethylbenzene	ND		ug/kg	0.94	0.13	1
Chloromethane	ND		ug/kg	3.8	0.88	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.94	0.32	1
Chloroethane	ND		ug/kg	1.9	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.94	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-02

Date Collected: 12/21/18 09:40

Client ID: RB05_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.47	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.94	0.27	1
Xylenes, Total	ND		ug/kg	0.94	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.94	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.94	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.22	1
Styrene	ND		ug/kg	0.94	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.4	0.86	1
Acetone	ND		ug/kg	9.4	4.5	1
Carbon disulfide	ND		ug/kg	9.4	4.3	1
2-Butanone	ND		ug/kg	9.4	2.1	1
Vinyl acetate	ND		ug/kg	9.4	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.4	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.4	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.94	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.47	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.94	0.16	1
sec-Butylbenzene	ND		ug/kg	0.94	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.94	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.94	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.94	0.10	1
Naphthalene	ND		ug/kg	3.8	0.61	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.94	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.31	1
1,4-Dioxane	ND		ug/kg	94	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.7	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 17:44
 Analyst: AD
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.4	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.88	0.13	1
Chloroform	ND		ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.88	0.20	1
1,2-Dichloropropane	ND		ug/kg	0.88	0.11	1
Dibromochloromethane	ND		ug/kg	0.88	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.88	0.23	1
Tetrachloroethene	0.42	J	ug/kg	0.44	0.17	1
Chlorobenzene	ND		ug/kg	0.44	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.5	0.61	1
1,2-Dichloroethane	ND		ug/kg	0.88	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.44	0.15	1
Bromodichloromethane	ND		ug/kg	0.44	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.88	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.44	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.44	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.44	0.14	1
Bromoform	ND		ug/kg	3.5	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.44	0.14	1
Benzene	0.14	J	ug/kg	0.44	0.14	1
Toluene	ND		ug/kg	0.88	0.48	1
Ethylbenzene	0.23	J	ug/kg	0.88	0.12	1
Chloromethane	ND		ug/kg	3.5	0.82	1
Bromomethane	ND		ug/kg	1.8	0.51	1
Vinyl chloride	ND		ug/kg	0.88	0.29	1
Chloroethane	ND		ug/kg	1.8	0.40	1
1,1-Dichloroethene	ND		ug/kg	0.88	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-03

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.44	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	0.88	J	ug/kg	1.8	0.49	1
o-Xylene	0.40	J	ug/kg	0.88	0.26	1
Xylenes, Total	1.3	J	ug/kg	0.88	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.88	0.15	1
1,2-Dichloroethene, Total	ND		ug/kg	0.88	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.21	1
Styrene	ND		ug/kg	0.88	0.17	1
Dichlorodifluoromethane	ND		ug/kg	8.8	0.80	1
Acetone	4.6	J	ug/kg	8.8	4.2	1
Carbon disulfide	ND		ug/kg	8.8	4.0	1
2-Butanone	ND		ug/kg	8.8	1.9	1
Vinyl acetate	ND		ug/kg	8.8	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	8.8	1.1	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.11	1
2-Hexanone	ND		ug/kg	8.8	1.0	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.88	0.24	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.44	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.88	0.15	1
sec-Butylbenzene	ND		ug/kg	0.88	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.10	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	0.88	1
Hexachlorobutadiene	ND		ug/kg	3.5	0.15	1
Isopropylbenzene	ND		ug/kg	0.88	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.88	0.10	1
Naphthalene	ND		ug/kg	3.5	0.57	1
Acrylonitrile	ND		ug/kg	3.5	1.0	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
Client ID: RB05_13-15
Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.88	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.28	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.29	1
1,4-Dioxane	ND		ug/kg	88	31.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.34	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.4	1.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
 Client ID: RB05_19-21
 Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 18:10
 Analyst: AD
 Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.72	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.17	1
Bromodichloromethane	ND		ug/kg	0.52	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.52	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.52	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.52	0.16	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.56	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.97	1
Bromomethane	ND		ug/kg	2.1	0.60	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.47	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
Client ID: RB05_19-21
Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.58	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.95	1
Acetone	23		ug/kg	10	5.0	1
Carbon disulfide	ND		ug/kg	10	4.7	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.52	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.2	0.18	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.2	0.68	1
Acrylonitrile	ND		ug/kg	4.2	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
Client ID: RB05_19-21
Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	100	36.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.18	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 19:02
 Analyst: AD
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	0.74		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-05

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.99	1
Acetone	ND		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 20:45
 Analyst: AD
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	0.67		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.74	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.58	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.1	0.62	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.1	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-06

Date Collected: 12/21/18 12:40

Client ID: RB06_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.22	1
p/m-Xylene	ND		ug/kg	2.1	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.1	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.98	1
Acetone	18		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.1	0.13	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.19	1
p-Ethyltoluene	ND		ug/kg	2.1	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.36	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	88		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 21:11
 Analyst: AD
 Percent Solids: 69%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.7	3.5	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.22	1
Chloroform	ND		ug/kg	2.3	0.22	1
Carbon tetrachloride	ND		ug/kg	1.5	0.35	1
1,2-Dichloropropane	ND		ug/kg	1.5	0.19	1
Dibromochloromethane	ND		ug/kg	1.5	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.41	1
Tetrachloroethene	ND		ug/kg	0.77	0.30	1
Chlorobenzene	ND		ug/kg	0.77	0.20	1
Trichlorofluoromethane	ND		ug/kg	6.2	1.1	1
1,2-Dichloroethane	ND		ug/kg	1.5	0.40	1
1,1,1-Trichloroethane	ND		ug/kg	0.77	0.26	1
Bromodichloromethane	ND		ug/kg	0.77	0.17	1
trans-1,3-Dichloropropene	ND		ug/kg	1.5	0.42	1
cis-1,3-Dichloropropene	ND		ug/kg	0.77	0.24	1
1,3-Dichloropropene, Total	ND		ug/kg	0.77	0.24	1
1,1-Dichloropropene	ND		ug/kg	0.77	0.24	1
Bromoform	ND		ug/kg	6.2	0.38	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.77	0.26	1
Benzene	0.38	J	ug/kg	0.77	0.26	1
Toluene	ND		ug/kg	1.5	0.84	1
Ethylbenzene	ND		ug/kg	1.5	0.22	1
Chloromethane	ND		ug/kg	6.2	1.4	1
Bromomethane	ND		ug/kg	3.1	0.90	1
Vinyl chloride	ND		ug/kg	1.5	0.52	1
Chloroethane	ND		ug/kg	3.1	0.70	1
1,1-Dichloroethene	ND		ug/kg	1.5	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	2.3	0.21	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-07

Date Collected: 12/21/18 12:50

Client ID: RB06_10-12

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.77	0.21	1
1,2-Dichlorobenzene	ND		ug/kg	3.1	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	3.1	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	3.1	0.26	1
Methyl tert butyl ether	ND		ug/kg	3.1	0.31	1
p/m-Xylene	ND		ug/kg	3.1	0.86	1
o-Xylene	ND		ug/kg	1.5	0.45	1
Xylenes, Total	ND		ug/kg	1.5	0.45	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	0.27	1
1,2-Dichloroethene, Total	ND		ug/kg	1.5	0.21	1
Dibromomethane	ND		ug/kg	3.1	0.37	1
Styrene	ND		ug/kg	1.5	0.30	1
Dichlorodifluoromethane	ND		ug/kg	15	1.4	1
Acetone	26		ug/kg	15	7.4	1
Carbon disulfide	11	J	ug/kg	15	7.0	1
2-Butanone	ND		ug/kg	15	3.4	1
Vinyl acetate	ND		ug/kg	15	3.3	1
4-Methyl-2-pentanone	ND		ug/kg	15	2.0	1
1,2,3-Trichloropropane	ND		ug/kg	3.1	0.20	1
2-Hexanone	ND		ug/kg	15	1.8	1
Bromochloromethane	ND		ug/kg	3.1	0.32	1
2,2-Dichloropropane	ND		ug/kg	3.1	0.31	1
1,2-Dibromoethane	ND		ug/kg	1.5	0.43	1
1,3-Dichloropropane	ND		ug/kg	3.1	0.26	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.77	0.20	1
Bromobenzene	ND		ug/kg	3.1	0.22	1
n-Butylbenzene	ND		ug/kg	1.5	0.26	1
sec-Butylbenzene	ND		ug/kg	1.5	0.22	1
tert-Butylbenzene	ND		ug/kg	3.1	0.18	1
o-Chlorotoluene	ND		ug/kg	3.1	0.29	1
p-Chlorotoluene	ND		ug/kg	3.1	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.6	1.5	1
Hexachlorobutadiene	ND		ug/kg	6.2	0.26	1
Isopropylbenzene	ND		ug/kg	1.5	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.5	0.17	1
Naphthalene	ND		ug/kg	6.2	1.0	1
Acrylonitrile	ND		ug/kg	6.2	1.8	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.5	0.26	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.1	0.50	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.1	0.42	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.1	0.30	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.1	0.51	1
1,4-Dioxane	ND		ug/kg	150	54.	1
p-Diethylbenzene	ND		ug/kg	3.1	0.27	1
p-Ethyltoluene	ND		ug/kg	3.1	0.59	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.1	0.29	1
Ethyl ether	ND		ug/kg	3.1	0.52	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.7	2.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 22:03
 Analyst: MV
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.1	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	2.2		ug/kg	0.61	0.24	1
Chlorobenzene	ND		ug/kg	0.61	0.16	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.85	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	0.20	1
Bromodichloromethane	ND		ug/kg	0.61	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.61	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.61	0.20	1
Bromoform	ND		ug/kg	4.9	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	0.20	1
Benzene	ND		ug/kg	0.61	0.20	1
Toluene	ND		ug/kg	1.2	0.67	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.9	1.1	1
Bromomethane	ND		ug/kg	2.4	0.71	1
Vinyl chloride	ND		ug/kg	1.2	0.41	1
Chloroethane	ND		ug/kg	2.4	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
Client ID: RB04_0-2
Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.61	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.25	1
p/m-Xylene	ND		ug/kg	2.4	0.69	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.9	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.16	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.61	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.9	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.9	0.80	1
Acrylonitrile	ND		ug/kg	4.9	1.4	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
Client ID: RB04_0-2
Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.41	1
1,4-Dioxane	ND		ug/kg	120	43.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.22	1
p-Ethyltoluene	ND		ug/kg	2.4	0.47	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.42	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.1	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 22:29
 Analyst: MV
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.6	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.93	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.93	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.93	0.12	1
Dibromochloromethane	ND		ug/kg	0.93	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.93	0.25	1
Tetrachloroethene	ND		ug/kg	0.46	0.18	1
Chlorobenzene	ND		ug/kg	0.46	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.65	1
1,2-Dichloroethane	ND		ug/kg	0.93	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.16	1
Bromodichloromethane	ND		ug/kg	0.46	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.93	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.46	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.46	0.15	1
Bromoform	ND		ug/kg	3.7	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1
Benzene	ND		ug/kg	0.46	0.15	1
Toluene	ND		ug/kg	0.93	0.50	1
Ethylbenzene	ND		ug/kg	0.93	0.13	1
Chloromethane	ND		ug/kg	3.7	0.87	1
Bromomethane	ND		ug/kg	1.9	0.54	1
Vinyl chloride	ND		ug/kg	0.93	0.31	1
Chloroethane	ND		ug/kg	1.9	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.93	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09

Date Collected: 12/21/18 13:40

Client ID: RB04_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.46	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.52	1
o-Xylene	ND		ug/kg	0.93	0.27	1
Xylenes, Total	ND		ug/kg	0.93	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.93	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.93	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.22	1
Styrene	ND		ug/kg	0.93	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.3	0.85	1
Acetone	ND		ug/kg	9.3	4.5	1
Carbon disulfide	ND		ug/kg	9.3	4.2	1
2-Butanone	ND		ug/kg	9.3	2.1	1
Vinyl acetate	ND		ug/kg	9.3	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.3	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.3	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.93	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.46	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.93	0.16	1
sec-Butylbenzene	ND		ug/kg	0.93	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.93	1
Hexachlorobutadiene	ND		ug/kg	3.7	0.16	1
Isopropylbenzene	ND		ug/kg	0.93	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.93	0.10	1
Naphthalene	ND		ug/kg	3.7	0.60	1
Acrylonitrile	ND		ug/kg	3.7	1.1	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.93	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.31	1
1,4-Dioxane	ND		ug/kg	93	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.16	1
p-Ethyltoluene	ND		ug/kg	1.9	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.6	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 22:55
 Analyst: MV
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.58	0.23	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.81	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.20	1
Bromodichloromethane	ND		ug/kg	0.58	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.63	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.3	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-10

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.65	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	24		ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.7	0.76	1
Acrylonitrile	ND		ug/kg	4.7	1.3	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.39	1
1,4-Dioxane	ND		ug/kg	120	41.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.21	1
p-Ethyltoluene	ND		ug/kg	2.3	0.45	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 13:15
 Analyst: NLK
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	0.50		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.94	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	100	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-12
 Client ID: SOTB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 16:45
 Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-12
 Client ID: SOTB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-12
 Client ID: SOTB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 17:15
 Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
Client ID: SOFB01_122118
Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 09:06
 Analyst: JC
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.8	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.36	1
Tetrachloroethene	ND		ug/kg	0.68	0.27	1
Chlorobenzene	ND		ug/kg	0.68	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.95	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.68	0.23	1
Bromodichloromethane	ND		ug/kg	0.68	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.68	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.68	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.68	0.22	1
Bromoform	ND		ug/kg	5.5	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.68	0.23	1
Benzene	0.36	J	ug/kg	0.68	0.23	1
Toluene	ND		ug/kg	1.4	0.74	1
Ethylbenzene	1.6		ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.5	1.3	1
Bromomethane	ND		ug/kg	2.7	0.79	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.7	0.62	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.19	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-14

Date Collected: 12/21/18 14:00

Client ID: RB04_18-20

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.68	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.76	1
o-Xylene	0.62	J	ug/kg	1.4	0.40	1
Xylenes, Total	0.62	J	ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.7	0.32	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	52		ug/kg	14	6.6	1
Carbon disulfide	ND		ug/kg	14	6.2	1
2-Butanone	11	J	ug/kg	14	3.0	1
Vinyl acetate	ND		ug/kg	14	2.9	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.7	0.17	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
2,2-Dichloropropane	ND		ug/kg	2.7	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
1,3-Dichloropropane	ND		ug/kg	2.7	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.68	0.18	1
Bromobenzene	ND		ug/kg	2.7	0.20	1
n-Butylbenzene	0.23	J	ug/kg	1.4	0.23	1
sec-Butylbenzene	0.28	J	ug/kg	1.4	0.20	1
tert-Butylbenzene	0.19	J	ug/kg	2.7	0.16	1
o-Chlorotoluene	ND		ug/kg	2.7	0.26	1
p-Chlorotoluene	ND		ug/kg	2.7	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.5	0.23	1
Isopropylbenzene	0.78	J	ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	120		ug/kg	5.5	0.89	1
Acrylonitrile	ND		ug/kg	5.5	1.6	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
Client ID: RB04_18-20
Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.43	J	ug/kg	1.4	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.37	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	2.9		ug/kg	2.7	0.46	1
1,4-Dioxane	ND		ug/kg	140	48.	1
p-Diethylbenzene	0.42	J	ug/kg	2.7	0.24	1
p-Ethyltoluene	ND		ug/kg	2.7	0.52	1
1,2,4,5-Tetramethylbenzene	1.7	J	ug/kg	2.7	0.26	1
Ethyl ether	ND		ug/kg	2.7	0.46	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.8	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 09:56
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12-13 Batch: WG1194042-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 09:56
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12-13 Batch: WG1194042-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 09:56
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12-13 Batch: WG1194042-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 14:17
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02-10 Batch: WG1194240-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 14:17
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02-10 Batch: WG1194240-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/02/19 14:17
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02-10 Batch: WG1194240-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	99		70-130



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 08:10
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,11,14 Batch: WG1194326-10					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 08:10
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,11,14 Batch: WG1194326-10					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/03/19 08:10
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,11,14 Batch: WG1194326-10					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	103		70-130



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12-13 Batch: WG1194042-3 WG1194042-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	100		110		63-132	10		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	100		110		63-130	10		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		110		75-130	10		20
Trichlorofluoromethane	100		110		62-150	10		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	100		110		70-130	10		20
cis-1,3-Dichloropropene	100		110		70-130	10		20
1,1-Dichloropropene	100		110		70-130	10		20
Bromoform	100		100		54-136	0		20
1,1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	100		110		70-130	10		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	90		92		64-130	2		20
Bromomethane	48		50		39-139	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12-13 Batch: WG1194042-3 WG1194042-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	100		110		55-138	10		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Trichloroethene	100		110		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	99		100		70-130	1		20
Methyl tert butyl ether	100		110		63-130	10		20
p/m-Xylene	100		110		70-130	10		20
o-Xylene	100		110		70-130	10		20
cis-1,2-Dichloroethene	100		110		70-130	10		20
Dibromomethane	100		110		70-130	10		20
1,2,3-Trichloropropane	110		120		64-130	9		20
Acrylonitrile	97		110		70-130	13		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	130		130		58-148	0		20
Carbon disulfide	100		110		51-130	10		20
2-Butanone	83		84		63-138	1		20
Vinyl acetate	110		120		70-130	9		20
4-Methyl-2-pentanone	96		100		59-130	4		20
2-Hexanone	98		110		57-130	12		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12-13 Batch: WG1194042-3 WG1194042-4								
Bromochloromethane	110		120		70-130	9		20
2,2-Dichloropropane	100		110		63-133	10		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	100		110		70-130	10		20
tert-Butylbenzene	100		110		70-130	10		20
o-Chlorotoluene	93		97		70-130	4		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	94		100		41-144	6		20
Hexachlorobutadiene	110		110		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	96		100		70-130	4		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	98		100		70-130	2		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	128		126		56-162	2		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12-13 Batch: WG1194042-3 WG1194042-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	110		110		59-134	0		20
trans-1,4-Dichloro-2-butene	94		97		70-130	3		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	108		109		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	104		101		70-130
Dibromofluoromethane	103		104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02-10 Batch: WG1194240-3 WG1194240-4								
Methylene chloride	84		81		70-130	4		30
1,1-Dichloroethane	87		83		70-130	5		30
Chloroform	91		88		70-130	3		30
Carbon tetrachloride	92		87		70-130	6		30
1,2-Dichloropropane	82		81		70-130	1		30
Dibromochloromethane	84		82		70-130	2		30
1,1,2-Trichloroethane	86		86		70-130	0		30
Tetrachloroethene	92		90		70-130	2		30
Chlorobenzene	85		83		70-130	2		30
Trichlorofluoromethane	112		106		70-139	6		30
1,2-Dichloroethane	83		82		70-130	1		30
1,1,1-Trichloroethane	93		87		70-130	7		30
Bromodichloromethane	84		83		70-130	1		30
trans-1,3-Dichloropropene	86		84		70-130	2		30
cis-1,3-Dichloropropene	84		83		70-130	1		30
1,1-Dichloropropene	93		90		70-130	3		30
Bromoform	84		84		70-130	0		30
1,1,2,2-Tetrachloroethane	81		81		70-130	0		30
Benzene	87		84		70-130	4		30
Toluene	86		82		70-130	5		30
Ethylbenzene	83		80		70-130	4		30
Chloromethane	92		82		52-130	11		30
Bromomethane	105		100		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02-10 Batch: WG1194240-3 WG1194240-4								
Vinyl chloride	106		97		67-130	9		30
Chloroethane	113		105		50-151	7		30
1,1-Dichloroethene	92		87		65-135	6		30
trans-1,2-Dichloroethene	90		84		70-130	7		30
Trichloroethene	87		86		70-130	1		30
1,2-Dichlorobenzene	83		84		70-130	1		30
1,3-Dichlorobenzene	86		86		70-130	0		30
1,4-Dichlorobenzene	83		83		70-130	0		30
Methyl tert butyl ether	84		82		66-130	2		30
p/m-Xylene	86		84		70-130	2		30
o-Xylene	84		83		70-130	1		30
cis-1,2-Dichloroethene	90		84		70-130	7		30
Dibromomethane	90		89		70-130	1		30
Styrene	80		78		70-130	3		30
Dichlorodifluoromethane	80		72		30-146	11		30
Acetone	72		69		54-140	4		30
Carbon disulfide	92		85		59-130	8		30
2-Butanone	59	Q	54	Q	70-130	9		30
Vinyl acetate	83		80		70-130	4		30
4-Methyl-2-pentanone	71		73		70-130	3		30
1,2,3-Trichloropropane	81		82		68-130	1		30
2-Hexanone	60	Q	64	Q	70-130	6		30
Bromochloromethane	93		91		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02-10 Batch: WG1194240-3 WG1194240-4								
2,2-Dichloropropane	84		80		70-130	5		30
1,2-Dibromoethane	89		89		70-130	0		30
1,3-Dichloropropane	86		85		69-130	1		30
1,1,1,2-Tetrachloroethane	85		83		70-130	2		30
Bromobenzene	86		85		70-130	1		30
n-Butylbenzene	82		84		70-130	2		30
sec-Butylbenzene	82		83		70-130	1		30
tert-Butylbenzene	86		87		70-130	1		30
o-Chlorotoluene	86		80		70-130	7		30
p-Chlorotoluene	82		80		70-130	2		30
1,2-Dibromo-3-chloropropane	81		79		68-130	3		30
Hexachlorobutadiene	83		86		67-130	4		30
Isopropylbenzene	86		86		70-130	0		30
p-Isopropyltoluene	85		86		70-130	1		30
Naphthalene	80		80		70-130	0		30
Acrylonitrile	81		80		70-130	1		30
n-Propylbenzene	85		85		70-130	0		30
1,2,3-Trichlorobenzene	85		87		70-130	2		30
1,2,4-Trichlorobenzene	83		85		70-130	2		30
1,3,5-Trimethylbenzene	84		86		70-130	2		30
1,2,4-Trimethylbenzene	83		83		70-130	0		30
1,4-Dioxane	105		98		65-136	7		30
p-Diethylbenzene	79		80		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02-10 Batch: WG1194240-3 WG1194240-4								
p-Ethyltoluene	80		82		70-130	2		30
1,2,4,5-Tetramethylbenzene	78		78		70-130	0		30
Ethyl ether	87		86		67-130	1		30
trans-1,4-Dichloro-2-butene	76		75		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		95		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	93		94		70-130
Dibromofluoromethane	101		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,11,14 Batch: WG1194326-8 WG1194326-9								
Methylene chloride	85		82		70-130	4		30
1,1-Dichloroethane	96		93		70-130	3		30
Chloroform	95		92		70-130	3		30
Carbon tetrachloride	96		92		70-130	4		30
1,2-Dichloropropane	99		95		70-130	4		30
Dibromochloromethane	96		96		70-130	0		30
1,1,2-Trichloroethane	104		102		70-130	2		30
Tetrachloroethene	101		98		70-130	3		30
Chlorobenzene	98		96		70-130	2		30
Trichlorofluoromethane	87		84		70-139	4		30
1,2-Dichloroethane	100		97		70-130	3		30
1,1,1-Trichloroethane	100		96		70-130	4		30
Bromodichloromethane	97		96		70-130	1		30
trans-1,3-Dichloropropene	98		97		70-130	1		30
cis-1,3-Dichloropropene	93		92		70-130	1		30
1,1-Dichloropropene	110		106		70-130	4		30
Bromoform	97		96		70-130	1		30
1,1,2,2-Tetrachloroethane	103		100		70-130	3		30
Benzene	98		94		70-130	4		30
Toluene	103		99		70-130	4		30
Ethylbenzene	107		104		70-130	3		30
Chloromethane	92		85		52-130	8		30
Bromomethane	68		68		57-147	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,11,14 Batch: WG1194326-8 WG1194326-9									
Vinyl chloride	88		83		67-130		6		30
Chloroethane	80		77		50-151		4		30
1,1-Dichloroethene	98		83		65-135		17		30
trans-1,2-Dichloroethene	89		86		70-130		3		30
Trichloroethene	98		93		70-130		5		30
1,2-Dichlorobenzene	100		100		70-130		0		30
1,3-Dichlorobenzene	101		101		70-130		0		30
1,4-Dichlorobenzene	99		96		70-130		3		30
Methyl tert butyl ether	95		94		66-130		1		30
p/m-Xylene	107		105		70-130		2		30
o-Xylene	107		105		70-130		2		30
cis-1,2-Dichloroethene	92		91		70-130		1		30
Dibromomethane	96		94		70-130		2		30
Styrene	98		97		70-130		1		30
Dichlorodifluoromethane	59		55		30-146		7		30
Acetone	112		106		54-140		6		30
Carbon disulfide	88		84		59-130		5		30
2-Butanone	104		94		70-130		10		30
Vinyl acetate	116		112		70-130		4		30
4-Methyl-2-pentanone	99		97		70-130		2		30
1,2,3-Trichloropropane	105		104		68-130		1		30
2-Hexanone	111		100		70-130		10		30
Bromochloromethane	91		89		70-130		2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,11,14 Batch: WG1194326-8 WG1194326-9								
2,2-Dichloropropane	103		99		70-130	4		30
1,2-Dibromoethane	100		101		70-130	1		30
1,3-Dichloropropane	105		104		69-130	1		30
1,1,1,2-Tetrachloroethane	99		100		70-130	1		30
Bromobenzene	100		97		70-130	3		30
n-Butylbenzene	115		113		70-130	2		30
sec-Butylbenzene	104		105		70-130	1		30
tert-Butylbenzene	111		108		70-130	3		30
o-Chlorotoluene	108		105		70-130	3		30
p-Chlorotoluene	110		107		70-130	3		30
1,2-Dibromo-3-chloropropane	96		97		68-130	1		30
Hexachlorobutadiene	102		98		67-130	4		30
Isopropylbenzene	113		109		70-130	4		30
p-Isopropyltoluene	111		111		70-130	0		30
Naphthalene	99		99		70-130	0		30
Acrylonitrile	94		89		70-130	5		30
n-Propylbenzene	112		108		70-130	4		30
1,2,3-Trichlorobenzene	99		98		70-130	1		30
1,2,4-Trichlorobenzene	101		101		70-130	0		30
1,3,5-Trimethylbenzene	111		107		70-130	4		30
1,2,4-Trimethylbenzene	113		110		70-130	3		30
1,4-Dioxane	108		106		65-136	2		30
p-Diethylbenzene	109		107		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,11,14 Batch: WG1194326-8 WG1194326-9								
p-Ethyltoluene	107		104		70-130	3		30
1,2,4,5-Tetramethylbenzene	102		102		70-130	0		30
Ethyl ether	77		78		67-130	1		30
trans-1,4-Dichloro-2-butene	101		106		70-130	5		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	110		108		70-130
Toluene-d8	107		107		70-130
4-Bromofluorobenzene	110		107		70-130
Dibromofluoromethane	99		99		70-130

SEMIVOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 08:28
 Analyst: RC
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	2800		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	160	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	150	J	ug/kg	180	63.	1
Butyl benzyl phthalate	57	J	ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	1400		ug/kg	110	20.	1
Benzo(a)pyrene	1700		ug/kg	140	44.	1
Benzo(b)fluoranthene	2300		ug/kg	110	31.	1
Benzo(k)fluoranthene	740		ug/kg	110	29.	1
Chrysene	1500		ug/kg	110	19.	1
Acenaphthylene	880		ug/kg	140	28.	1
Anthracene	640		ug/kg	110	35.	1
Benzo(ghi)perylene	1300		ug/kg	140	21.	1
Fluorene	150	J	ug/kg	180	18.	1
Phenanthrene	1300		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	260		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	1300		ug/kg	140	25.	1
Pyrene	2400		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	99	J	ug/kg	180	17.	1
2-Methylnaphthalene	83	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	35	J	ug/kg	260	28.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	250		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	93		10-136
4-Terphenyl-d14	54		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 04:13
 Analyst: RC
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	61	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	1100		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	48	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	87	J	ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-02

Date Collected: 12/21/18 09:40

Client ID: RB05_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	420		ug/kg	110	20.	1
Benzo(a)pyrene	490		ug/kg	140	44.	1
Benzo(b)fluoranthene	590		ug/kg	110	30.	1
Benzo(k)fluoranthene	200		ug/kg	110	29.	1
Chrysene	400		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	130		ug/kg	110	35.	1
Benzo(ghi)perylene	310		ug/kg	140	21.	1
Fluorene	49	J	ug/kg	180	18.	1
Phenanthrene	500		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	53	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	310		ug/kg	140	25.	1
Pyrene	950		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	28	J	ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	860	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	86.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	37	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	66		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	57		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 04:39
 Analyst: RC
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	100	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	1100		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	95	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-03

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	530		ug/kg	110	20.	1
Benzo(a)pyrene	620		ug/kg	140	44.	1
Benzo(b)fluoranthene	680		ug/kg	110	30.	1
Benzo(k)fluoranthene	200		ug/kg	110	29.	1
Chrysene	480		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	130		ug/kg	110	35.	1
Benzo(ghi)perylene	380		ug/kg	140	21.	1
Fluorene	62	J	ug/kg	180	18.	1
Phenanthrene	470		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	66	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	380		ug/kg	140	25.	1
Pyrene	1000		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	37	J	ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	36	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	98		10-136
4-Terphenyl-d14	49		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
 Client ID: RB05_19-21
 Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 05:04
 Analyst: RC
 Percent Solids: 75%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	310		ug/kg	170	22.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	25.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	220	21.	1
1,2-Dichlorobenzene	ND		ug/kg	220	39.	1
1,3-Dichlorobenzene	ND		ug/kg	220	37.	1
1,4-Dichlorobenzene	ND		ug/kg	220	38.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	57.	1
2,4-Dinitrotoluene	ND		ug/kg	220	43.	1
2,6-Dinitrotoluene	ND		ug/kg	220	37.	1
Fluoranthene	1800		ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1
Hexachlorobutadiene	ND		ug/kg	220	32.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	200	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	150	J	ug/kg	220	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	33.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	75.	1
Butyl benzyl phthalate	ND		ug/kg	220	54.	1
Di-n-butylphthalate	ND		ug/kg	220	41.	1
Di-n-octylphthalate	ND		ug/kg	220	73.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-04

Date Collected: 12/21/18 10:00

Client ID: RB05_19-21

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	20.	1
Dimethyl phthalate	ND		ug/kg	220	45.	1
Benzo(a)anthracene	1100		ug/kg	130	24.	1
Benzo(a)pyrene	1100		ug/kg	170	53.	1
Benzo(b)fluoranthene	1200		ug/kg	130	36.	1
Benzo(k)fluoranthene	360		ug/kg	130	34.	1
Chrysene	930		ug/kg	130	22.	1
Acenaphthylene	52	J	ug/kg	170	33.	1
Anthracene	120	J	ug/kg	130	42.	1
Benzo(ghi)perylene	740		ug/kg	170	25.	1
Fluorene	47	J	ug/kg	220	21.	1
Phenanthrene	250		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	130		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	650		ug/kg	170	30.	1
Pyrene	1700		ug/kg	130	21.	1
Biphenyl	ND		ug/kg	490	50.	1
4-Chloroaniline	ND		ug/kg	220	39.	1
2-Nitroaniline	ND		ug/kg	220	42.	1
3-Nitroaniline	ND		ug/kg	220	41.	1
4-Nitroaniline	ND		ug/kg	220	89.	1
Dibenzofuran	43	J	ug/kg	220	20.	1
2-Methylnaphthalene	31	J	ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	22.	1
Acetophenone	ND		ug/kg	220	27.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	41.	1
p-Chloro-m-cresol	ND		ug/kg	220	32.	1
2-Chlorophenol	ND		ug/kg	220	26.	1
2,4-Dichlorophenol	ND		ug/kg	190	35.	1
2,4-Dimethylphenol	ND		ug/kg	220	71.	1
2-Nitrophenol	ND		ug/kg	470	81.	1
4-Nitrophenol	ND		ug/kg	300	88.	1
2,4-Dinitrophenol	ND		ug/kg	1000	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	100	1
Pentachlorophenol	ND		ug/kg	170	47.	1
Phenol	ND		ug/kg	220	32.	1
2-Methylphenol	ND		ug/kg	220	33.	1
3-Methylphenol/4-Methylphenol	120	J	ug/kg	310	34.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
Client ID: RB05_19-21
Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	220	41.	1
Benzoic Acid	ND		ug/kg	700	220	1
Benzyl Alcohol	ND		ug/kg	220	66.	1
Carbazole	40	J	ug/kg	220	21.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	83		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	102		10-136
4-Terphenyl-d14	58		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 05:56
 Analyst: RC
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	52	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	4200		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	110	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	2400		ug/kg	110	21.	1
Benzo(a)pyrene	2600		ug/kg	150	46.	1
Benzo(b)fluoranthene	3800		ug/kg	110	32.	1
Benzo(k)fluoranthene	1100		ug/kg	110	30.	1
Chrysene	2400		ug/kg	110	20.	1
Acenaphthylene	1500		ug/kg	150	29.	1
Anthracene	700		ug/kg	110	37.	1
Benzo(ghi)perylene	2000		ug/kg	150	22.	1
Fluorene	97	J	ug/kg	190	18.	1
Phenanthrene	1400		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	400		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	2000		ug/kg	150	26.	1
Pyrene	3700		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	51	J	ug/kg	190	18.	1
2-Methylnaphthalene	34	J	ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	49	J	ug/kg	270	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	240		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	55		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 06:21
 Analyst: RC
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	96	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	6300		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	280		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-06

Date Collected: 12/21/18 12:40

Client ID: RB06_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	3300		ug/kg	110	20.	1
Benzo(a)pyrene	3500		ug/kg	150	45.	1
Benzo(b)fluoranthene	5000		ug/kg	110	31.	1
Benzo(k)fluoranthene	1300		ug/kg	110	29.	1
Chrysene	3200		ug/kg	110	19.	1
Acenaphthylene	2400		ug/kg	150	28.	1
Anthracene	1200		ug/kg	110	36.	1
Benzo(ghi)perylene	2900		ug/kg	150	22.	1
Fluorene	200		ug/kg	180	18.	1
Phenanthrene	3100		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	630		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	2900		ug/kg	150	25.	1
Pyrene	5100		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	190		ug/kg	180	17.	1
2-Methylnaphthalene	87	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	150		ug/kg	150	40.	1
Phenol	43	J	ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	82	J	ug/kg	260	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	420		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	26		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	16		10-136
4-Terphenyl-d14	54		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 02:06
 Analyst: RC
 Percent Solids: 69%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	190	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	240	27.	1
Hexachlorobenzene	ND		ug/kg	140	27.	1
Bis(2-chloroethyl)ether	ND		ug/kg	210	32.	1
2-Chloronaphthalene	ND		ug/kg	240	24.	1
1,2-Dichlorobenzene	ND		ug/kg	240	43.	1
1,3-Dichlorobenzene	ND		ug/kg	240	41.	1
1,4-Dichlorobenzene	ND		ug/kg	240	42.	1
3,3'-Dichlorobenzidine	ND		ug/kg	240	63.	1
2,4-Dinitrotoluene	ND		ug/kg	240	48.	1
2,6-Dinitrotoluene	ND		ug/kg	240	41.	1
Fluoranthene	ND		ug/kg	140	27.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	240	26.	1
4-Bromophenyl phenyl ether	ND		ug/kg	240	36.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	290	41.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	260	24.	1
Hexachlorobutadiene	ND		ug/kg	240	35.	1
Hexachlorocyclopentadiene	ND		ug/kg	680	220	1
Hexachloroethane	ND		ug/kg	190	38.	1
Isophorone	ND		ug/kg	210	31.	1
Naphthalene	58	J	ug/kg	240	29.	1
Nitrobenzene	ND		ug/kg	210	35.	1
NDPA/DPA	ND		ug/kg	190	27.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	240	37.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	240	82.	1
Butyl benzyl phthalate	ND		ug/kg	240	60.	1
Di-n-butylphthalate	ND		ug/kg	240	45.	1
Di-n-octylphthalate	ND		ug/kg	240	81.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-07

Date Collected: 12/21/18 12:50

Client ID: RB06_10-12

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	240	22.	1
Dimethyl phthalate	ND		ug/kg	240	50.	1
Benzo(a)anthracene	ND		ug/kg	140	27.	1
Benzo(a)pyrene	ND		ug/kg	190	58.	1
Benzo(b)fluoranthene	ND		ug/kg	140	40.	1
Benzo(k)fluoranthene	ND		ug/kg	140	38.	1
Chrysene	ND		ug/kg	140	25.	1
Acenaphthylene	ND		ug/kg	190	37.	1
Anthracene	ND		ug/kg	140	46.	1
Benzo(ghi)perylene	ND		ug/kg	190	28.	1
Fluorene	ND		ug/kg	240	23.	1
Phenanthrene	ND		ug/kg	140	29.	1
Dibenzo(a,h)anthracene	ND		ug/kg	140	28.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	190	33.	1
Pyrene	ND		ug/kg	140	24.	1
Biphenyl	ND		ug/kg	540	55.	1
4-Chloroaniline	ND		ug/kg	240	43.	1
2-Nitroaniline	ND		ug/kg	240	46.	1
3-Nitroaniline	ND		ug/kg	240	45.	1
4-Nitroaniline	ND		ug/kg	240	99.	1
Dibenzofuran	ND		ug/kg	240	22.	1
2-Methylnaphthalene	ND		ug/kg	290	29.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	25.	1
Acetophenone	ND		ug/kg	240	30.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	45.	1
p-Chloro-m-cresol	ND		ug/kg	240	36.	1
2-Chlorophenol	ND		ug/kg	240	28.	1
2,4-Dichlorophenol	ND		ug/kg	210	38.	1
2,4-Dimethylphenol	ND		ug/kg	240	79.	1
2-Nitrophenol	ND		ug/kg	520	90.	1
4-Nitrophenol	ND		ug/kg	330	97.	1
2,4-Dinitrophenol	ND		ug/kg	1100	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	620	110	1
Pentachlorophenol	ND		ug/kg	190	52.	1
Phenol	ND		ug/kg	240	36.	1
2-Methylphenol	ND		ug/kg	240	37.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	340	37.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
Client ID: RB06_10-12
Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	240	46.	1
Benzoic Acid	ND		ug/kg	770	240	1
Benzyl Alcohol	ND		ug/kg	240	73.	1
Carbazole	ND		ug/kg	240	23.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	93		10-136
4-Terphenyl-d14	55		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 06:46
 Analyst: RC
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	80	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	3200		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	140	J	ug/kg	180	23.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	1600		ug/kg	110	21.	1
Benzo(a)pyrene	1600		ug/kg	150	45.	1
Benzo(b)fluoranthene	2200		ug/kg	110	31.	1
Benzo(k)fluoranthene	790		ug/kg	110	30.	1
Chrysene	1600		ug/kg	110	19.	1
Acenaphthylene	640		ug/kg	150	29.	1
Anthracene	460		ug/kg	110	36.	1
Benzo(ghi)perylene	1100		ug/kg	150	22.	1
Fluorene	100	J	ug/kg	180	18.	1
Phenanthrene	1700		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	230		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	1100		ug/kg	150	26.	1
Pyrene	2700		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	78	J	ug/kg	180	18.	1
2-Methylnaphthalene	97	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	36.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	180		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	98		10-136
4-Terphenyl-d14	63		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
Client ID: RB04_8-10
Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 12/30/18 03:48
Analyst: RC
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	42	J	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	26	J	ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	43	J	ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	25	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	32	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	24	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	48	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	ND		ug/kg	180	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	57.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	80		10-136
4-Terphenyl-d14	62		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 05:30
 Analyst: RC
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	160		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	3200		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	570		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-10

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	1800		ug/kg	120	22.	1
Benzo(a)pyrene	1700		ug/kg	150	47.	1
Benzo(b)fluoranthene	2100		ug/kg	120	32.	1
Benzo(k)fluoranthene	560		ug/kg	120	31.	1
Chrysene	1500		ug/kg	120	20.	1
Acenaphthylene	110	J	ug/kg	150	30.	1
Anthracene	620		ug/kg	120	37.	1
Benzo(ghi)perylene	880		ug/kg	150	22.	1
Fluorene	180	J	ug/kg	190	19.	1
Phenanthrene	1600		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	180		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	930		ug/kg	150	27.	1
Pyrene	3100		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	86	J	ug/kg	190	18.	1
2-Methylnaphthalene	54	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	130	J	ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	30	J	ug/kg	280	30.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	62	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	55		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 03:23
 Analyst: RC
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	55	J	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	26	J	ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	35	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	27	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	28	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	51	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	86.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
Client ID: SODUP01_122118
Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	81		10-136
4-Terphenyl-d14	81		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 16:52
 Analyst: ALS

Extraction Method: EPA 3510C
 Extraction Date: 12/27/18 02:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	43		10-120
4-Terphenyl-d14	68		41-149

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/03/19 22:26
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 12/27/18 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-13

Date Collected: 12/21/18 14:45

Client ID: SOFB01_122118

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	86		41-149

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/30/18 07:12
 Analyst: RC
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	970		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	4800		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	1100		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	140	J	ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-14

Date Collected: 12/21/18 14:00

Client ID: RB04_18-20

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	2400		ug/kg	110	21.	1
Benzo(a)pyrene	2300		ug/kg	150	46.	1
Benzo(b)fluoranthene	2700		ug/kg	110	32.	1
Benzo(k)fluoranthene	900		ug/kg	110	30.	1
Chrysene	2000		ug/kg	110	20.	1
Acenaphthylene	89	J	ug/kg	150	29.	1
Anthracene	1800		ug/kg	110	37.	1
Benzo(ghi)perylene	1300		ug/kg	150	22.	1
Fluorene	870		ug/kg	190	18.	1
Phenanthrene	4600		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	260		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	1400		ug/kg	150	26.	1
Pyrene	4500		ug/kg	110	19.	1
Biphenyl	100	J	ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	520		ug/kg	190	18.	1
2-Methylnaphthalene	270		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	180		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	440		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	92		10-136
4-Terphenyl-d14	54		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/30/18 00:16
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11,14 Batch: WG1192583-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/30/18 00:16
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11,14 Batch: WG1192583-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	69.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	160	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 12/30/18 00:16
 Analyst: RC

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 01:26

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11,14 Batch: WG1192583-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	87		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	85		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/31/18 14:16
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 20:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1192882-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/31/18 14:16
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 20:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1192882-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 12/31/18 14:16
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 20:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1192882-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	39		10-120
4-Terphenyl-d14	73		41-149

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/03/19 18:56
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 13 Batch: WG1192883-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	0.01	J	ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**Analytical Method: 1,8270D-SIM
Analytical Date: 01/03/19 18:56
Analyst: CBExtraction Method: EPA 3510C
Extraction Date: 12/26/18 20:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 13 Batch: WG1192883-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	49		10-120
4-Terphenyl-d14	89		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192583-2 WG1192583-3								
Acenaphthene	87		82		31-137	6		50
1,2,4-Trichlorobenzene	91		86		38-107	6		50
Hexachlorobenzene	91		84		40-140	8		50
Bis(2-chloroethyl)ether	88		82		40-140	7		50
2-Chloronaphthalene	96		92		40-140	4		50
1,2-Dichlorobenzene	87		83		40-140	5		50
1,3-Dichlorobenzene	86		82		40-140	5		50
1,4-Dichlorobenzene	85		83		28-104	2		50
3,3'-Dichlorobenzidine	84		87		40-140	4		50
2,4-Dinitrotoluene	110		104		40-132	6		50
2,6-Dinitrotoluene	110		102		40-140	8		50
Fluoranthene	98		96		40-140	2		50
4-Chlorophenyl phenyl ether	87		81		40-140	7		50
4-Bromophenyl phenyl ether	91		83		40-140	9		50
Bis(2-chloroisopropyl)ether	81		76		40-140	6		50
Bis(2-chloroethoxy)methane	91		82		40-117	10		50
Hexachlorobutadiene	86		81		40-140	6		50
Hexachlorocyclopentadiene	84		78		40-140	7		50
Hexachloroethane	85		82		40-140	4		50
Isophorone	89		83		40-140	7		50
Naphthalene	92		89		40-140	3		50
Nitrobenzene	94		88		40-140	7		50
NDPA/DPA	89		86		36-157	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192583-2 WG1192583-3								
n-Nitrosodi-n-propylamine	86		81		32-121	6		50
Bis(2-ethylhexyl)phthalate	115		113		40-140	2		50
Butyl benzyl phthalate	109		109		40-140	0		50
Di-n-butylphthalate	108		105		40-140	3		50
Di-n-octylphthalate	118		117		40-140	1		50
Diethyl phthalate	94		89		40-140	5		50
Dimethyl phthalate	97		91		40-140	6		50
Benzo(a)anthracene	91		88		40-140	3		50
Benzo(a)pyrene	106		105		40-140	1		50
Benzo(b)fluoranthene	110		100		40-140	10		50
Benzo(k)fluoranthene	97		104		40-140	7		50
Chrysene	98		96		40-140	2		50
Acenaphthylene	99		93		40-140	6		50
Anthracene	102		99		40-140	3		50
Benzo(ghi)perylene	101		97		40-140	4		50
Fluorene	94		88		40-140	7		50
Phenanthrene	98		94		40-140	4		50
Dibenzo(a,h)anthracene	98		94		40-140	4		50
Indeno(1,2,3-cd)pyrene	100		97		40-140	3		50
Pyrene	98		97		35-142	1		50
Biphenyl	99		94		54-104	5		50
4-Chloroaniline	83		81		40-140	2		50
2-Nitroaniline	115		111		47-134	4		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192583-2 WG1192583-3								
3-Nitroaniline	79		80		26-129	1		50
4-Nitroaniline	97		92		41-125	5		50
Dibenzofuran	93		88		40-140	6		50
2-Methylnaphthalene	93		88		40-140	6		50
1,2,4,5-Tetrachlorobenzene	99		92		40-117	7		50
Acetophenone	94		88		14-144	7		50
2,4,6-Trichlorophenol	105		102		30-130	3		50
p-Chloro-m-cresol	100		96		26-103	4		50
2-Chlorophenol	99		92		25-102	7		50
2,4-Dichlorophenol	104		100		30-130	4		50
2,4-Dimethylphenol	101		94		30-130	7		50
2-Nitrophenol	117		107		30-130	9		50
4-Nitrophenol	114		108		11-114	5		50
2,4-Dinitrophenol	108		106		4-130	2		50
4,6-Dinitro-o-cresol	107		104		10-130	3		50
Pentachlorophenol	109		103		17-109	6		50
Phenol	88		85		26-90	3		50
2-Methylphenol	97		92		30-130.	5		50
3-Methylphenol/4-Methylphenol	106		98		30-130	8		50
2,4,5-Trichlorophenol	105		101		30-130	4		50
Benzoic Acid	33		38		10-110	14		50
Benzyl Alcohol	95		89		40-140	7		50
Carbazole	102		100		54-128	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192583-2 WG1192583-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	98		91		25-120
Phenol-d6	98		91		10-120
Nitrobenzene-d5	99		91		23-120
2-Fluorobiphenyl	95		92		30-120
2,4,6-Tribromophenol	101		91		10-136
4-Terphenyl-d14	89		85		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1192882-2 WG1192882-3								
Acenaphthene	72		72		37-111	0		30
1,2,4-Trichlorobenzene	73		76		39-98	4		30
Hexachlorobenzene	84		83		40-140	1		30
Bis(2-chloroethyl)ether	79		83		40-140	5		30
2-Chloronaphthalene	77		76		40-140	1		30
1,2-Dichlorobenzene	71		73		40-140	3		30
1,3-Dichlorobenzene	70		71		40-140	1		30
1,4-Dichlorobenzene	69		71		36-97	3		30
3,3'-Dichlorobenzidine	29	Q	43		40-140	39	Q	30
2,4-Dinitrotoluene	78		76		48-143	3		30
2,6-Dinitrotoluene	79		77		40-140	3		30
Fluoranthene	76		74		40-140	3		30
4-Chlorophenyl phenyl ether	76		74		40-140	3		30
4-Bromophenyl phenyl ether	85		81		40-140	5		30
Bis(2-chloroisopropyl)ether	83		89		40-140	7		30
Bis(2-chloroethoxy)methane	77		83		40-140	8		30
Hexachlorobutadiene	78		75		40-140	4		30
Hexachlorocyclopentadiene	75		74		40-140	1		30
Hexachloroethane	72		72		40-140	0		30
Isophorone	76		81		40-140	6		30
Naphthalene	73		74		40-140	1		30
Nitrobenzene	76		81		40-140	6		30
NDPA/DPA	70		69		40-140	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1192882-2 WG1192882-3								
n-Nitrosodi-n-propylamine	79		83		29-132	5		30
Bis(2-ethylhexyl)phthalate	69		70		40-140	1		30
Butyl benzyl phthalate	63		62		40-140	2		30
Di-n-butylphthalate	66		66		40-140	0		30
Di-n-octylphthalate	62		63		40-140	2		30
Diethyl phthalate	73		72		40-140	1		30
Dimethyl phthalate	76		75		40-140	1		30
Benzo(a)anthracene	71		72		40-140	1		30
Benzo(a)pyrene	84		82		40-140	2		30
Benzo(b)fluoranthene	80		82		40-140	2		30
Benzo(k)fluoranthene	86		81		40-140	6		30
Chrysene	75		76		40-140	1		30
Acenaphthylene	76		76		45-123	0		30
Anthracene	74		73		40-140	1		30
Benzo(ghi)perylene	79		78		40-140	1		30
Fluorene	74		74		40-140	0		30
Phenanthrene	72		72		40-140	0		30
Dibenzo(a,h)anthracene	76		76		40-140	0		30
Indeno(1,2,3-cd)pyrene	71		72		40-140	1		30
Pyrene	74		72		26-127	3		30
Biphenyl	76		76		40-140	0		30
4-Chloroaniline	44		51		40-140	15		30
2-Nitroaniline	75		73		52-143	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1192882-2 WG1192882-3								
3-Nitroaniline	51		58		25-145	13		30
4-Nitroaniline	61		58		51-143	5		30
Dibenzofuran	74		74		40-140	0		30
2-Methylnaphthalene	76		76		40-140	0		30
1,2,4,5-Tetrachlorobenzene	78		79		2-134	1		30
Acetophenone	76		82		39-129	8		30
2,4,6-Trichlorophenol	75		72		30-130	4		30
p-Chloro-m-cresol	75		75		23-97	0		30
2-Chlorophenol	71		76		27-123	7		30
2,4-Dichlorophenol	74		75		30-130	1		30
2,4-Dimethylphenol	30		29	Q	30-130	3		30
2-Nitrophenol	72		77		30-130	7		30
4-Nitrophenol	78		73		10-80	7		30
2,4-Dinitrophenol	84		84		20-130	0		30
4,6-Dinitro-o-cresol	82		80		20-164	2		30
Pentachlorophenol	82		72		9-103	13		30
Phenol	60		63		12-110	5		30
2-Methylphenol	64		65		30-130	2		30
3-Methylphenol/4-Methylphenol	70		72		30-130	3		30
2,4,5-Trichlorophenol	77		78		30-130	1		30
Benzoic Acid	55		62		10-164	12		30
Benzyl Alcohol	69		76		26-116	10		30
Carbazole	70		69		55-144	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1192882-2 WG1192882-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	65		71		21-120
Phenol-d6	55		60		10-120
Nitrobenzene-d5	74		80		23-120
2-Fluorobiphenyl	73		73		15-120
2,4,6-Tribromophenol	80		76		10-120
4-Terphenyl-d14	66		65		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 13 Batch: WG1192883-2 WG1192883-3								
Acenaphthene	82		72		40-140	13		40
2-Chloronaphthalene	76		69		40-140	10		40
Fluoranthene	87		79		40-140	10		40
Hexachlorobutadiene	68		68		40-140	0		40
Naphthalene	74		67		40-140	10		40
Benzo(a)anthracene	89		79		40-140	12		40
Benzo(a)pyrene	96		85		40-140	12		40
Benzo(b)fluoranthene	92		82		40-140	11		40
Benzo(k)fluoranthene	98		86		40-140	13		40
Chrysene	83		74		40-140	11		40
Acenaphthylene	85		75		40-140	13		40
Anthracene	86		77		40-140	11		40
Benzo(ghi)perylene	82		76		40-140	8		40
Fluorene	86		76		40-140	12		40
Phenanthrene	81		72		40-140	12		40
Dibenzo(a,h)anthracene	88		82		40-140	7		40
Indeno(1,2,3-cd)pyrene	88		81		40-140	8		40
Pyrene	87		79		40-140	10		40
2-Methylnaphthalene	77		69		40-140	11		40
Pentachlorophenol	89		82		40-140	8		40
Hexachlorobenzene	82		75		40-140	9		40
Hexachloroethane	66		67		40-140	2		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 13 Batch: WG1192883-2 WG1192883-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	57		53		21-120
Phenol-d6	54		48		10-120
Nitrobenzene-d5	89		78		23-120
2-Fluorobiphenyl	75		69		15-120
2,4,6-Tribromophenol	60		63		10-120
4-Terphenyl-d14	80		73		41-149

PCBS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 18:52
 Analyst: HT
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.4	3.14	1	A
Aroclor 1221	ND		ug/kg	35.4	3.55	1	A
Aroclor 1232	ND		ug/kg	35.4	7.50	1	A
Aroclor 1242	ND		ug/kg	35.4	4.77	1	A
Aroclor 1248	ND		ug/kg	35.4	5.31	1	A
Aroclor 1254	ND		ug/kg	35.4	3.87	1	A
Aroclor 1260	57.7		ug/kg	35.4	6.54	1	B
Aroclor 1262	ND		ug/kg	35.4	4.49	1	A
Aroclor 1268	ND		ug/kg	35.4	3.67	1	A
PCBs, Total	57.7		ug/kg	35.4	3.14	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	106		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 19:05
 Analyst: HT
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	3.27	1	A
Aroclor 1221	ND		ug/kg	36.8	3.69	1	A
Aroclor 1232	ND		ug/kg	36.8	7.80	1	A
Aroclor 1242	ND		ug/kg	36.8	4.96	1	A
Aroclor 1248	ND		ug/kg	36.8	5.52	1	A
Aroclor 1254	ND		ug/kg	36.8	4.03	1	A
Aroclor 1260	ND		ug/kg	36.8	6.80	1	A
Aroclor 1262	ND		ug/kg	36.8	4.67	1	A
Aroclor 1268	ND		ug/kg	36.8	3.81	1	A
PCBs, Total	ND		ug/kg	36.8	3.27	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 20:48
 Analyst: HT
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.5	3.24	1	A
Aroclor 1221	ND		ug/kg	36.5	3.65	1	A
Aroclor 1232	ND		ug/kg	36.5	7.73	1	A
Aroclor 1242	ND		ug/kg	36.5	4.92	1	A
Aroclor 1248	ND		ug/kg	36.5	5.47	1	A
Aroclor 1254	ND		ug/kg	36.5	3.99	1	A
Aroclor 1260	ND		ug/kg	36.5	6.74	1	A
Aroclor 1262	ND		ug/kg	36.5	4.63	1	A
Aroclor 1268	ND		ug/kg	36.5	3.78	1	A
PCBs, Total	ND		ug/kg	36.5	3.24	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
 Client ID: RB05_19-21
 Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 21:01
 Analyst: HT
 Percent Solids: 75%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	42.7	3.79	1	A
Aroclor 1221	ND		ug/kg	42.7	4.28	1	A
Aroclor 1232	ND		ug/kg	42.7	9.05	1	A
Aroclor 1242	ND		ug/kg	42.7	5.75	1	A
Aroclor 1248	ND		ug/kg	42.7	6.40	1	A
Aroclor 1254	ND		ug/kg	42.7	4.67	1	A
Aroclor 1260	ND		ug/kg	42.7	7.89	1	A
Aroclor 1262	ND		ug/kg	42.7	5.42	1	A
Aroclor 1268	ND		ug/kg	42.7	4.42	1	A
PCBs, Total	ND		ug/kg	42.7	3.79	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	35		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	44		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 21:14
 Analyst: HT
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.5	3.24	1	A
Aroclor 1221	ND		ug/kg	36.5	3.66	1	A
Aroclor 1232	ND		ug/kg	36.5	7.75	1	A
Aroclor 1242	ND		ug/kg	36.5	4.92	1	A
Aroclor 1248	ND		ug/kg	36.5	5.48	1	A
Aroclor 1254	ND		ug/kg	36.5	4.00	1	A
Aroclor 1260	ND		ug/kg	36.5	6.75	1	A
Aroclor 1262	ND		ug/kg	36.5	4.64	1	A
Aroclor 1268	13.1	J	ug/kg	36.5	3.78	1	A
PCBs, Total	13.1	J	ug/kg	36.5	3.24	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	100		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 21:27
 Analyst: HT
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.2	3.22	1	A
Aroclor 1221	ND		ug/kg	36.2	3.63	1	A
Aroclor 1232	ND		ug/kg	36.2	7.68	1	A
Aroclor 1242	ND		ug/kg	36.2	4.88	1	A
Aroclor 1248	ND		ug/kg	36.2	5.44	1	A
Aroclor 1254	ND		ug/kg	36.2	3.96	1	A
Aroclor 1260	ND		ug/kg	36.2	6.70	1	A
Aroclor 1262	ND		ug/kg	36.2	4.60	1	A
Aroclor 1268	13.0	J	ug/kg	36.2	3.75	1	B
PCBs, Total	13.0	J	ug/kg	36.2	3.22	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	125		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 21:40
 Analyst: HT
 Percent Solids: 69%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	47.9	4.25	1	A
Aroclor 1221	ND		ug/kg	47.9	4.80	1	A
Aroclor 1232	ND		ug/kg	47.9	10.2	1	A
Aroclor 1242	ND		ug/kg	47.9	6.46	1	A
Aroclor 1248	ND		ug/kg	47.9	7.18	1	A
Aroclor 1254	ND		ug/kg	47.9	5.24	1	A
Aroclor 1260	ND		ug/kg	47.9	8.85	1	A
Aroclor 1262	ND		ug/kg	47.9	6.08	1	A
Aroclor 1268	ND		ug/kg	47.9	4.96	1	A
PCBs, Total	ND		ug/kg	47.9	4.25	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 21:53
 Analyst: HT
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	3.27	1	A
Aroclor 1221	ND		ug/kg	36.8	3.69	1	A
Aroclor 1232	ND		ug/kg	36.8	7.81	1	A
Aroclor 1242	ND		ug/kg	36.8	4.96	1	A
Aroclor 1248	ND		ug/kg	36.8	5.52	1	A
Aroclor 1254	ND		ug/kg	36.8	4.03	1	A
Aroclor 1260	48.7	P	ug/kg	36.8	6.80	1	B
Aroclor 1262	ND		ug/kg	36.8	4.68	1	A
Aroclor 1268	17.5	J	ug/kg	36.8	3.82	1	A
PCBs, Total	66.2	J	ug/kg	36.8	3.27	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 22:06
 Analyst: HT
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:17
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.9	3.28	1	A
Aroclor 1221	ND		ug/kg	36.9	3.70	1	A
Aroclor 1232	ND		ug/kg	36.9	7.83	1	A
Aroclor 1242	ND		ug/kg	36.9	4.98	1	A
Aroclor 1248	ND		ug/kg	36.9	5.54	1	A
Aroclor 1254	ND		ug/kg	36.9	4.04	1	A
Aroclor 1260	ND		ug/kg	36.9	6.83	1	A
Aroclor 1262	ND		ug/kg	36.9	4.69	1	A
Aroclor 1268	ND		ug/kg	36.9	3.83	1	A
PCBs, Total	ND		ug/kg	36.9	3.28	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 22:19
 Analyst: HT
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:17
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.5	3.33	1	A
Aroclor 1221	ND		ug/kg	37.5	3.75	1	A
Aroclor 1232	ND		ug/kg	37.5	7.94	1	A
Aroclor 1242	ND		ug/kg	37.5	5.05	1	A
Aroclor 1248	ND		ug/kg	37.5	5.62	1	A
Aroclor 1254	ND		ug/kg	37.5	4.10	1	A
Aroclor 1260	ND		ug/kg	37.5	6.92	1	A
Aroclor 1262	ND		ug/kg	37.5	4.76	1	A
Aroclor 1268	ND		ug/kg	37.5	3.88	1	A
PCBs, Total	ND		ug/kg	37.5	3.33	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	39		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	52		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
Client ID: SODUP01_122118
Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 12/28/18 22:32
Analyst: HT
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 12/24/18 00:17
Cleanup Method: EPA 3665A
Cleanup Date: 12/24/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	3.23	1	A
Aroclor 1221	ND		ug/kg	36.4	3.64	1	A
Aroclor 1232	ND		ug/kg	36.4	7.71	1	A
Aroclor 1242	ND		ug/kg	36.4	4.90	1	A
Aroclor 1248	ND		ug/kg	36.4	5.46	1	A
Aroclor 1254	ND		ug/kg	36.4	3.98	1	A
Aroclor 1260	ND		ug/kg	36.4	6.72	1	A
Aroclor 1262	ND		ug/kg	36.4	4.62	1	A
Aroclor 1268	ND		ug/kg	36.4	3.77	1	A
PCBs, Total	ND		ug/kg	36.4	3.23	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
Client ID: SOFB01_122118
Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 12/30/18 17:38
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/28/18 00:45
Cleanup Method: EPA 3665A
Cleanup Date: 12/28/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/28/18 22:45
 Analyst: HT
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:17
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.7	3.26	1	A
Aroclor 1221	ND		ug/kg	36.7	3.68	1	A
Aroclor 1232	ND		ug/kg	36.7	7.78	1	A
Aroclor 1242	ND		ug/kg	36.7	4.95	1	A
Aroclor 1248	ND		ug/kg	36.7	5.51	1	A
Aroclor 1254	ND		ug/kg	36.7	4.02	1	A
Aroclor 1260	ND		ug/kg	36.7	6.78	1	A
Aroclor 1262	ND		ug/kg	36.7	4.66	1	A
Aroclor 1268	ND		ug/kg	36.7	3.80	1	A
PCBs, Total	ND		ug/kg	36.7	3.26	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 12/28/18 19:18
 Analyst: HT

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 00:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/24/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/24/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-11,14 Batch: WG1192580-1						
Aroclor 1016	ND		ug/kg	31.7	2.82	A
Aroclor 1221	ND		ug/kg	31.7	3.18	A
Aroclor 1232	ND		ug/kg	31.7	6.72	A
Aroclor 1242	ND		ug/kg	31.7	4.27	A
Aroclor 1248	ND		ug/kg	31.7	4.76	A
Aroclor 1254	ND		ug/kg	31.7	3.47	A
Aroclor 1260	ND		ug/kg	31.7	5.86	A
Aroclor 1262	ND		ug/kg	31.7	4.03	A
Aroclor 1268	ND		ug/kg	31.7	3.28	A
PCBs, Total	ND		ug/kg	31.7	2.82	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	99		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 12/30/18 17:51
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 12/28/18 00:45
Cleanup Method: EPA 3665A
Cleanup Date: 12/28/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 13 Batch: WG1193305-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	93		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192580-2 WG1192580-3									
Aroclor 1016	70		69		40-140	1		50	A
Aroclor 1260	55		56		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		91		30-150	A
Decachlorobiphenyl	61		59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		89		30-150	B
Decachlorobiphenyl	78		73		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193305-2 WG1193305-3									
Aroclor 1016	75		72		40-140	3		50	A
Aroclor 1260	78		76		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		81		30-150	A
Decachlorobiphenyl	87		82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		84		30-150	B
Decachlorobiphenyl	94		90		30-150	B

PESTICIDES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 11:56
 Analyst: KEG
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.76	0.345	1	A
Lindane	ND		ug/kg	0.734	0.328	1	A
Alpha-BHC	ND		ug/kg	0.734	0.208	1	A
Beta-BHC	ND		ug/kg	1.76	0.668	1	A
Heptachlor	ND		ug/kg	0.880	0.395	1	A
Aldrin	ND		ug/kg	1.76	0.620	1	A
Heptachlor epoxide	3.61		ug/kg	3.30	0.990	1	A
Endrin	ND		ug/kg	0.734	0.301	1	A
Endrin aldehyde	ND		ug/kg	2.20	0.770	1	A
Endrin ketone	ND		ug/kg	1.76	0.453	1	A
Dieldrin	ND		ug/kg	1.10	0.550	1	A
4,4'-DDE	78.5		ug/kg	1.76	0.407	1	A
4,4'-DDD	ND		ug/kg	1.76	0.628	1	A
4,4'-DDT	232	E	ug/kg	3.30	1.42	1	B
Endosulfan I	ND		ug/kg	1.76	0.416	1	A
Endosulfan II	ND		ug/kg	1.76	0.588	1	A
Endosulfan sulfate	ND		ug/kg	0.734	0.349	1	A
Methoxychlor	ND		ug/kg	3.30	1.03	1	A
Toxaphene	ND		ug/kg	33.0	9.24	1	A
cis-Chlordane	10.6	IP	ug/kg	2.20	0.613	1	B
trans-Chlordane	11.8	IP	ug/kg	2.20	0.581	1	A
Chlordane	ND		ug/kg	14.3	5.83	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	84		30-150	B
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	92		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 17:04
 Analyst: KEG
 Percent Solids: 90%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	182	11.4	1	A
2,4,5-T	ND		ug/kg	182	5.63	1	A
2,4,5-TP (Silvex)	ND		ug/kg	182	4.83	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	107		30-150	A
DCAA	93		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01 D
 Client ID: RB05_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:35
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 13:16
 Analyst: BM
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
4,4'-DDT	265		ug/kg	16.5	7.08	5	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 12:09
 Analyst: KEG
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.346	1	A
Lindane	ND		ug/kg	0.737	0.329	1	A
Alpha-BHC	ND		ug/kg	0.737	0.209	1	A
Beta-BHC	ND		ug/kg	1.77	0.671	1	A
Heptachlor	ND		ug/kg	0.884	0.396	1	A
Aldrin	ND		ug/kg	1.77	0.623	1	A
Heptachlor epoxide	ND		ug/kg	3.32	0.995	1	A
Endrin	ND		ug/kg	0.737	0.302	1	A
Endrin aldehyde	ND		ug/kg	2.21	0.774	1	A
Endrin ketone	ND		ug/kg	1.77	0.455	1	A
Dieldrin	ND		ug/kg	1.10	0.553	1	A
4,4'-DDE	ND		ug/kg	1.77	0.409	1	A
4,4'-DDD	ND		ug/kg	1.77	0.631	1	A
4,4'-DDT	ND		ug/kg	3.32	1.42	1	A
Endosulfan I	ND		ug/kg	1.77	0.418	1	A
Endosulfan II	ND		ug/kg	1.77	0.591	1	A
Endosulfan sulfate	ND		ug/kg	0.737	0.351	1	A
Methoxychlor	ND		ug/kg	3.32	1.03	1	A
Toxaphene	ND		ug/kg	33.2	9.29	1	A
cis-Chlordane	ND		ug/kg	2.21	0.616	1	A
trans-Chlordane	1.28	JIP	ug/kg	2.21	0.584	1	A
Chlordane	ND		ug/kg	14.4	5.86	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	60		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02
 Client ID: RB05_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 17:23
 Analyst: KEG
 Percent Solids: 90%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.71	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.90	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	115		30-150	A
DCAA	93		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 17:42
 Analyst: KEG
 Percent Solids: 89%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	186	11.7	1	A
2,4,5-T	ND		ug/kg	186	5.75	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.94	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	91		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03 D
 Client ID: RB05_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 09:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 13:54
 Analyst: KEG
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	35.1	6.87	20	A
Lindane	ND		ug/kg	14.6	6.53	20	A
Alpha-BHC	ND		ug/kg	14.6	4.15	20	A
Beta-BHC	ND		ug/kg	35.1	13.3	20	A
Heptachlor	ND		ug/kg	17.5	7.86	20	A
Aldrin	ND		ug/kg	35.1	12.3	20	A
Heptachlor epoxide	ND		ug/kg	65.7	19.7	20	A
Endrin	ND		ug/kg	14.6	5.99	20	A
Endrin aldehyde	ND		ug/kg	43.8	15.3	20	A
Endrin ketone	ND		ug/kg	35.1	9.03	20	A
Dieldrin	ND		ug/kg	21.9	11.0	20	A
4,4'-DDE	ND		ug/kg	35.1	8.11	20	A
4,4'-DDD	ND		ug/kg	35.1	12.5	20	A
4,4'-DDT	ND		ug/kg	65.7	28.2	20	A
Endosulfan I	ND		ug/kg	35.1	8.28	20	A
Endosulfan II	ND		ug/kg	35.1	11.7	20	A
Endosulfan sulfate	ND		ug/kg	14.6	6.95	20	A
Methoxychlor	ND		ug/kg	65.7	20.4	20	A
Toxaphene	ND		ug/kg	657	184.	20	A
cis-Chlordane	ND		ug/kg	43.8	12.2	20	A
trans-Chlordane	ND		ug/kg	43.8	11.6	20	A
Chlordane	ND		ug/kg	285	116.	20	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-03 D

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04
 Client ID: RB05_19-21
 Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 18:01
 Analyst: KEG
 Percent Solids: 75%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	217	13.6	1	A
2,4,5-T	ND		ug/kg	217	6.72	1	A
2,4,5-TP (Silvex)	ND		ug/kg	217	5.76	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	124		30-150	A
DCAA	98		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04 D
 Client ID: RB05_19-21
 Sample Location: BRONX, NY

Date Collected: 12/21/18 10:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 14:07
 Analyst: KEG
 Percent Solids: 75%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	41.3	8.09	20	A
Lindane	ND		ug/kg	17.2	7.69	20	A
Alpha-BHC	ND		ug/kg	17.2	4.89	20	A
Beta-BHC	ND		ug/kg	41.3	15.7	20	A
Heptachlor	ND		ug/kg	20.6	9.26	20	A
Aldrin	ND		ug/kg	41.3	14.5	20	A
Heptachlor epoxide	ND		ug/kg	77.5	23.2	20	A
Endrin	ND		ug/kg	17.2	7.06	20	A
Endrin aldehyde	ND		ug/kg	51.6	18.1	20	A
Endrin ketone	ND		ug/kg	41.3	10.6	20	A
Dieldrin	ND		ug/kg	25.8	12.9	20	A
4,4'-DDE	ND		ug/kg	41.3	9.55	20	A
4,4'-DDD	ND		ug/kg	41.3	14.7	20	A
4,4'-DDT	ND		ug/kg	77.5	33.2	20	A
Endosulfan I	ND		ug/kg	41.3	9.76	20	A
Endosulfan II	ND		ug/kg	41.3	13.8	20	A
Endosulfan sulfate	ND		ug/kg	17.2	8.19	20	A
Methoxychlor	ND		ug/kg	77.5	24.1	20	A
Toxaphene	ND		ug/kg	775	217.	20	A
cis-Chlordane	ND		ug/kg	51.6	14.4	20	A
trans-Chlordane	ND		ug/kg	51.6	13.6	20	A
Chlordane	ND		ug/kg	336	137.	20	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-04 D

Date Collected: 12/21/18 10:00

Client ID: RB05_19-21

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 12:47
 Analyst: KEG
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.361	1	A
Lindane	ND		ug/kg	0.768	0.343	1	A
Alpha-BHC	ND		ug/kg	0.768	0.218	1	A
Beta-BHC	ND		ug/kg	1.84	0.699	1	A
Heptachlor	0.568	J	ug/kg	0.922	0.413	1	B
Aldrin	ND		ug/kg	1.84	0.649	1	A
Heptachlor epoxide	1.26	JIP	ug/kg	3.46	1.04	1	B
Endrin	ND		ug/kg	0.768	0.315	1	A
Endrin aldehyde	ND		ug/kg	2.30	0.807	1	A
Endrin ketone	ND		ug/kg	1.84	0.475	1	A
Dieldrin	ND		ug/kg	1.15	0.576	1	A
4,4'-DDE	101		ug/kg	1.84	0.426	1	A
4,4'-DDD	3.18	IP	ug/kg	1.84	0.658	1	A
4,4'-DDT	255	E	ug/kg	3.46	1.48	1	A
Endosulfan I	ND		ug/kg	1.84	0.436	1	A
Endosulfan II	ND		ug/kg	1.84	0.616	1	A
Endosulfan sulfate	ND		ug/kg	0.768	0.366	1	A
Methoxychlor	ND		ug/kg	3.46	1.08	1	A
Toxaphene	ND		ug/kg	34.6	9.68	1	A
cis-Chlordane	26.7	IP	ug/kg	2.30	0.642	1	B
trans-Chlordane	35.0	IP	ug/kg	2.30	0.608	1	A
Chlordane	ND		ug/kg	15.0	6.11	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-05

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	102		30-150	B
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	103		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05
 Client ID: RB06_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 18:20
 Analyst: KEG
 Percent Solids: 87%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	188	11.8	1	A
2,4,5-T	ND		ug/kg	188	5.82	1	A
2,4,5-TP (Silvex)	ND		ug/kg	188	4.99	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	109		30-150	B

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-05 D

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8081B

Extraction Date: 12/24/18 02:47

Analytical Date: 01/03/19 13:29

Cleanup Method: EPA 3620B

Analyst: KEG

Cleanup Date: 12/27/18

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
4,4'-DDT	259		ug/kg	17.3	7.41	5	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 12:59
 Analyst: KEG
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.28	0.446	1	A
Lindane	ND		ug/kg	0.948	0.424	1	A
Alpha-BHC	ND		ug/kg	0.948	0.269	1	A
Beta-BHC	ND		ug/kg	2.28	0.863	1	A
Heptachlor	ND		ug/kg	1.14	0.510	1	A
Aldrin	ND		ug/kg	2.28	0.801	1	A
Heptachlor epoxide	ND	IP	ug/kg	4.27	1.28	1	B
Endrin	ND		ug/kg	0.948	0.389	1	A
Endrin aldehyde	ND		ug/kg	2.84	0.996	1	A
Endrin ketone	ND		ug/kg	2.28	0.586	1	A
Dieldrin	ND		ug/kg	1.42	0.711	1	A
4,4'-DDE	34.1		ug/kg	2.28	0.526	1	A
4,4'-DDD	1.42	J	ug/kg	2.28	0.812	1	B
4,4'-DDT	97.8		ug/kg	4.27	1.83	1	A
Endosulfan I	ND		ug/kg	2.28	0.538	1	A
Endosulfan II	ND		ug/kg	2.28	0.761	1	A
Endosulfan sulfate	ND		ug/kg	0.948	0.451	1	A
Methoxychlor	ND		ug/kg	4.27	1.33	1	A
Toxaphene	ND		ug/kg	42.7	12.0	1	A
cis-Chlordane	7.88	IP	ug/kg	2.84	0.793	1	B
trans-Chlordane	15.6	IP	ug/kg	2.84	0.751	1	A
Chlordane	ND		ug/kg	18.5	7.54	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	69		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	79		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06
 Client ID: RB06_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 18:39
 Analyst: KEG
 Percent Solids: 89%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.70	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.90	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	115		30-150	A
DCAA	133		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 13:12
 Analyst: KEG
 Percent Solids: 69%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.31	0.452	1	A
Lindane	ND		ug/kg	0.962	0.430	1	A
Alpha-BHC	ND		ug/kg	0.962	0.273	1	A
Beta-BHC	ND		ug/kg	2.31	0.875	1	A
Heptachlor	ND		ug/kg	1.15	0.517	1	A
Aldrin	ND		ug/kg	2.31	0.813	1	A
Heptachlor epoxide	ND		ug/kg	4.33	1.30	1	A
Endrin	ND		ug/kg	0.962	0.394	1	A
Endrin aldehyde	ND		ug/kg	2.88	1.01	1	A
Endrin ketone	ND		ug/kg	2.31	0.594	1	A
Dieldrin	ND		ug/kg	1.44	0.721	1	A
4,4'-DDE	ND		ug/kg	2.31	0.534	1	A
4,4'-DDD	ND		ug/kg	2.31	0.823	1	A
4,4'-DDT	ND		ug/kg	4.33	1.86	1	A
Endosulfan I	ND		ug/kg	2.31	0.545	1	A
Endosulfan II	ND		ug/kg	2.31	0.771	1	A
Endosulfan sulfate	ND		ug/kg	0.962	0.458	1	A
Methoxychlor	ND		ug/kg	4.33	1.35	1	A
Toxaphene	ND		ug/kg	43.3	12.1	1	A
cis-Chlordane	ND		ug/kg	2.88	0.804	1	A
trans-Chlordane	ND		ug/kg	2.88	0.762	1	A
Chlordane	ND		ug/kg	18.8	7.64	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	55		30-150	B
2,4,5,6-Tetrachloro-m-xylene	131		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07
 Client ID: RB06_10-12
 Sample Location: BRONX, NY

Date Collected: 12/21/18 12:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 19:16
 Analyst: KEG
 Percent Solids: 69%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	239	15.1	1	A
2,4,5-T	ND		ug/kg	239	7.42	1	A
2,4,5-TP (Silvex)	ND		ug/kg	239	6.36	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	116		30-150	A
DCAA	93		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 13:25
 Analyst: KEG
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.349	1	A
Lindane	ND		ug/kg	0.742	0.332	1	A
Alpha-BHC	ND		ug/kg	0.742	0.211	1	A
Beta-BHC	ND		ug/kg	1.78	0.676	1	A
Heptachlor	ND		ug/kg	0.891	0.399	1	A
Aldrin	ND		ug/kg	1.78	0.627	1	A
Heptachlor epoxide	1.03	JIP	ug/kg	3.34	1.00	1	B
Endrin	ND		ug/kg	0.742	0.304	1	A
Endrin aldehyde	ND		ug/kg	2.23	0.779	1	A
Endrin ketone	ND		ug/kg	1.78	0.459	1	A
Dieldrin	ND		ug/kg	1.11	0.557	1	A
4,4'-DDE	44.6		ug/kg	1.78	0.412	1	A
4,4'-DDD	2.64	IP	ug/kg	1.78	0.635	1	A
4,4'-DDT	156	E	ug/kg	3.34	1.43	1	A
Endosulfan I	ND		ug/kg	1.78	0.421	1	A
Endosulfan II	ND		ug/kg	1.78	0.595	1	A
Endosulfan sulfate	ND		ug/kg	0.742	0.353	1	A
Methoxychlor	ND		ug/kg	3.34	1.04	1	A
Toxaphene	ND		ug/kg	33.4	9.35	1	A
cis-Chlordane	16.1		ug/kg	2.23	0.620	1	A
trans-Chlordane	15.2	IP	ug/kg	2.23	0.588	1	A
Chlordane	ND		ug/kg	14.5	5.90	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-08

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	84		30-150	B
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	82		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08
 Client ID: RB04_0-2
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:30
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 19:35
 Analyst: KEG
 Percent Solids: 89%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.68	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.87	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	83		30-150	A
DCAA	103		30-150	B

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-08 D

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8081B

Extraction Date: 12/24/18 02:47

Analytical Date: 01/03/19 13:42

Cleanup Method: EPA 3620B

Analyst: KEG

Cleanup Date: 12/27/18

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
4,4'-DDT	174		ug/kg	6.68	2.86	2	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 13:37
 Analyst: KEG
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.82	0.356	1	A
Lindane	ND		ug/kg	0.758	0.339	1	A
Alpha-BHC	ND		ug/kg	0.758	0.215	1	A
Beta-BHC	ND		ug/kg	1.82	0.690	1	A
Heptachlor	ND		ug/kg	0.910	0.408	1	A
Aldrin	ND		ug/kg	1.82	0.641	1	A
Heptachlor epoxide	ND		ug/kg	3.41	1.02	1	A
Endrin	ND		ug/kg	0.758	0.311	1	A
Endrin aldehyde	ND		ug/kg	2.28	0.796	1	A
Endrin ketone	ND		ug/kg	1.82	0.469	1	A
Dieldrin	ND		ug/kg	1.14	0.569	1	A
4,4'-DDE	ND		ug/kg	1.82	0.421	1	A
4,4'-DDD	ND		ug/kg	1.82	0.649	1	A
4,4'-DDT	ND		ug/kg	3.41	1.46	1	A
Endosulfan I	ND		ug/kg	1.82	0.430	1	A
Endosulfan II	ND		ug/kg	1.82	0.608	1	A
Endosulfan sulfate	ND		ug/kg	0.758	0.361	1	A
Methoxychlor	ND		ug/kg	3.41	1.06	1	A
Toxaphene	ND		ug/kg	34.1	9.56	1	A
cis-Chlordane	ND		ug/kg	2.28	0.634	1	A
trans-Chlordane	ND		ug/kg	2.28	0.601	1	A
Chlordane	ND		ug/kg	14.8	6.03	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-09

Date Collected: 12/21/18 13:40

Client ID: RB04_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	68		30-150	B
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09
 Client ID: RB04_8-10
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:40
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 19:54
 Analyst: KEG
 Percent Solids: 88%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	186	11.7	1	A
2,4,5-T	ND		ug/kg	186	5.77	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	122		30-150	A
DCAA	100		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 20:13
 Analyst: KEG
 Percent Solids: 87%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	190	12.0	1	A
2,4,5-T	ND		ug/kg	190	5.90	1	A
2,4,5-TP (Silvex)	ND		ug/kg	190	5.06	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	159	Q	30-150	A
DCAA	127		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10 D
 Client ID: RB04_13-15
 Sample Location: BRONX, NY

Date Collected: 12/21/18 13:50
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 14:20
 Analyst: KEG
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	90.2	17.7	50	A
Lindane	ND		ug/kg	37.6	16.8	50	A
Alpha-BHC	ND		ug/kg	37.6	10.7	50	A
Beta-BHC	ND		ug/kg	90.2	34.2	50	A
Heptachlor	ND		ug/kg	45.1	20.2	50	A
Aldrin	ND		ug/kg	90.2	31.8	50	A
Heptachlor epoxide	ND		ug/kg	169	50.7	50	A
Endrin	ND		ug/kg	37.6	15.4	50	A
Endrin aldehyde	ND		ug/kg	113	39.5	50	A
Endrin ketone	ND		ug/kg	90.2	23.2	50	A
Dieldrin	ND		ug/kg	56.4	28.2	50	A
4,4'-DDE	ND		ug/kg	90.2	20.9	50	A
4,4'-DDD	ND		ug/kg	90.2	32.2	50	A
4,4'-DDT	ND		ug/kg	169	72.5	50	A
Endosulfan I	ND		ug/kg	90.2	21.3	50	A
Endosulfan II	ND		ug/kg	90.2	30.1	50	A
Endosulfan sulfate	ND		ug/kg	37.6	17.9	50	A
Methoxychlor	ND		ug/kg	169	52.6	50	A
Toxaphene	ND		ug/kg	1690	474.	50	A
cis-Chlordane	ND		ug/kg	113	31.4	50	A
trans-Chlordane	ND		ug/kg	113	29.8	50	A
Chlordane	ND		ug/kg	733	299.	50	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-10 D

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/28/18 14:03
 Analyst: KEG
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.95	0.381	1	A
Lindane	ND		ug/kg	0.811	0.362	1	A
Alpha-BHC	ND		ug/kg	0.811	0.230	1	A
Beta-BHC	ND		ug/kg	1.95	0.738	1	A
Heptachlor	ND		ug/kg	0.973	0.436	1	A
Aldrin	ND		ug/kg	1.95	0.685	1	A
Heptachlor epoxide	ND		ug/kg	3.65	1.09	1	A
Endrin	ND		ug/kg	0.811	0.332	1	A
Endrin aldehyde	ND		ug/kg	2.43	0.852	1	A
Endrin ketone	ND		ug/kg	1.95	0.501	1	A
Dieldrin	ND		ug/kg	1.22	0.608	1	A
4,4'-DDE	ND		ug/kg	1.95	0.450	1	A
4,4'-DDD	ND		ug/kg	1.95	0.694	1	A
4,4'-DDT	ND		ug/kg	3.65	1.56	1	A
Endosulfan I	ND		ug/kg	1.95	0.460	1	A
Endosulfan II	ND		ug/kg	1.95	0.650	1	A
Endosulfan sulfate	ND		ug/kg	0.811	0.386	1	A
Methoxychlor	ND		ug/kg	3.65	1.14	1	A
Toxaphene	ND		ug/kg	36.5	10.2	1	A
cis-Chlordane	ND		ug/kg	2.43	0.678	1	A
trans-Chlordane	ND		ug/kg	2.43	0.642	1	A
Chlordane	ND		ug/kg	15.8	6.45	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	59		30-150	B
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	62		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 20:32
 Analyst: KEG
 Percent Solids: 91%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	181	11.4	1	A
2,4,5-T	ND		ug/kg	181	5.62	1	A
2,4,5-TP (Silvex)	ND		ug/kg	181	4.82	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	110		30-150	A
DCAA	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
Client ID: SOFB01_122118
Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 01/03/19 13:58
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 12/28/18 00:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	17	Q	30-150	A
Decachlorobiphenyl	13	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	17	Q	30-150	B
Decachlorobiphenyl	13	Q	30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/02/19 13:31
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 15:31

Methylation Date: 12/28/18 08:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	118		30-150	A
DCAA	92		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13 RE
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 18:00
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 09:17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-13 RE

Date Collected: 12/21/18 14:45

Client ID: SOFB01_122118

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	71		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 20:51
 Analyst: KEG
 Percent Solids: 88%
 Methylation Date: 12/24/18 07:26

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	186	11.7	1	A
2,4,5-T	ND		ug/kg	186	5.78	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.96	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	129		30-150	A
DCAA	105		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14 D
 Client ID: RB04_18-20
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 14:32
 Analyst: KEG
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	89.6	17.5	50	A
Lindane	ND		ug/kg	37.3	16.7	50	A
Alpha-BHC	ND		ug/kg	37.3	10.6	50	A
Beta-BHC	ND		ug/kg	89.6	34.0	50	A
Heptachlor	ND		ug/kg	44.8	20.1	50	A
Aldrin	ND		ug/kg	89.6	31.5	50	A
Heptachlor epoxide	ND		ug/kg	168	50.4	50	A
Endrin	ND		ug/kg	37.3	15.3	50	A
Endrin aldehyde	ND		ug/kg	112	39.2	50	A
Endrin ketone	ND		ug/kg	89.6	23.1	50	A
Dieldrin	ND		ug/kg	56.0	28.0	50	A
4,4'-DDE	ND		ug/kg	89.6	20.7	50	A
4,4'-DDD	ND		ug/kg	89.6	31.9	50	A
4,4'-DDT	ND		ug/kg	168	72.0	50	A
Endosulfan I	ND		ug/kg	89.6	21.2	50	A
Endosulfan II	ND		ug/kg	89.6	29.9	50	A
Endosulfan sulfate	ND		ug/kg	37.3	17.8	50	A
Methoxychlor	ND		ug/kg	168	52.2	50	A
Toxaphene	ND		ug/kg	1680	470.	50	A
cis-Chlordane	ND		ug/kg	112	31.2	50	A
trans-Chlordane	ND		ug/kg	112	29.6	50	A
Chlordane	ND		ug/kg	728	297.	50	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-14 D

Date Collected: 12/21/18 14:00

Client ID: RB04_18-20

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 12/31/18 16:08
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/23/18 00:39

Methylation Date: 12/24/18 07:26

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-11,14 Batch: WG1192478-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.01	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.30	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	0	Q	30-150	A
DCAA	0	Q	30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/27/18 22:15
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 12/24/18 02:47
Cleanup Method: EPA 3620B
Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-11,14 Batch: WG1192586-1						
Delta-BHC	ND		ug/kg	1.58	0.309	A
Lindane	ND		ug/kg	0.658	0.294	A
Alpha-BHC	ND		ug/kg	0.658	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.599	A
Heptachlor	ND		ug/kg	0.789	0.354	A
Aldrin	ND		ug/kg	1.58	0.556	A
Heptachlor epoxide	ND		ug/kg	2.96	0.888	A
Endrin	ND		ug/kg	0.658	0.270	A
Endrin aldehyde	ND		ug/kg	1.97	0.691	A
Endrin ketone	ND		ug/kg	1.58	0.406	A
Dieldrin	ND		ug/kg	0.987	0.493	A
4,4'-DDE	ND		ug/kg	1.58	0.365	A
4,4'-DDD	ND		ug/kg	1.58	0.563	A
4,4'-DDT	ND		ug/kg	2.96	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.373	A
Endosulfan II	ND		ug/kg	1.58	0.528	A
Endosulfan sulfate	ND		ug/kg	0.658	0.313	A
Methoxychlor	ND		ug/kg	2.96	0.921	A
Toxaphene	ND		ug/kg	29.6	8.29	A
cis-Chlordane	ND		ug/kg	1.97	0.550	A
trans-Chlordane	ND		ug/kg	1.97	0.521	A
Chlordane	ND		ug/kg	12.8	5.23	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 12/27/18 22:15
 Analyst: BM

Extraction Method: EPA 3546
 Extraction Date: 12/24/18 02:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/27/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-11,14 Batch: WG1192586-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	71		30-150	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/02/19 12:35
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 15:31

Methylation Date: 12/28/18 08:56

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 13 Batch: WG1193192-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	116		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/03/19 13:20
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 12/28/18 00:37

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13 Batch: WG1193304-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**Analytical Method: 1,8081B
Analytical Date: 01/03/19 13:20
Analyst: BMExtraction Method: EPA 3510C
Extraction Date: 12/28/18 00:37

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13 Batch: WG1193304-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	A
Decachlorobiphenyl	45		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	47		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/30/18 17:22
Analyst: KEG

Extraction Method: EPA 3510C
Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13 Batch: WG1193824-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A
4,4'-DDT	0.025	JIP	ug/l	0.029	0.003	B

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**Analytical Method: 1,8081B
Analytical Date: 12/30/18 17:22
Analyst: KEGExtraction Method: EPA 3510C
Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 13 Batch: WG1193824-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	61		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192478-2 WG1192478-3									
2,4-D	89		101		30-150	13		30	A
2,4,5-T	97		103		30-150	6		30	A
2,4,5-TP (Silvex)	85		89		30-150	5		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	91		98		30-150	A
DCAA	108		96		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192586-2 WG1192586-3									
Delta-BHC	94		91		30-150	3		30	A
Lindane	94		90		30-150	4		30	A
Alpha-BHC	99		85		30-150	15		30	A
Beta-BHC	98		97		30-150	1		30	A
Heptachlor	97		94		30-150	3		30	A
Aldrin	86		83		30-150	4		30	A
Heptachlor epoxide	91		88		30-150	3		30	A
Endrin	96		94		30-150	2		30	A
Endrin aldehyde	54		54		30-150	0		30	A
Endrin ketone	82		79		30-150	4		30	A
Dieldrin	99		97		30-150	2		30	A
4,4'-DDE	83		72		30-150	14		30	A
4,4'-DDD	82		85		30-150	4		30	A
4,4'-DDT	94		93		30-150	1		30	A
Endosulfan I	83		80		30-150	4		30	A
Endosulfan II	85		83		30-150	2		30	A
Endosulfan sulfate	66		65		30-150	2		30	A
Methoxychlor	96		95		30-150	1		30	A
cis-Chlordane	72		68		30-150	6		30	A
trans-Chlordane	56		66		30-150	16		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-11,14 Batch: WG1192586-2 WG1192586-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	83		81		30-150	B
Decachlorobiphenyl	82		82		30-150	B
2,4,5,6-Tetrachloro-m-xylene	76		76		30-150	A
Decachlorobiphenyl	79		77		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193192-2 WG1193192-3									
2,4-D	104		103		30-150	1		25	A
2,4,5-T	107		111		30-150	4		25	A
2,4,5-TP (Silvex)	101		100		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	115		115		30-150	A
DCAA	104		122		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193304-2 WG1193304-3									
Delta-BHC	64		62		30-150	3		20	A
Lindane	64		62		30-150	4		20	A
Alpha-BHC	75		73		30-150	2		20	A
Beta-BHC	70		70		30-150	1		20	A
Heptachlor	62		58		30-150	6		20	A
Aldrin	64		61		30-150	4		20	A
Heptachlor epoxide	66		64		30-150	3		20	A
Endrin	64		63		30-150	2		20	A
Endrin aldehyde	33		36		30-150	10		20	A
Endrin ketone	59		59		30-150	1		20	A
Dieldrin	69		68		30-150	2		20	A
4,4'-DDE	65		63		30-150	3		20	A
4,4'-DDD	64		62		30-150	2		20	A
4,4'-DDT	62		60		30-150	3		20	A
Endosulfan I	77		80		30-150	3		20	A
Endosulfan II	58		57		30-150	1		20	A
Endosulfan sulfate	52		52		30-150	1		20	A
Methoxychlor	69		67		30-150	3		20	A
cis-Chlordane	58		57		30-150	2		20	A
trans-Chlordane	65		64		30-150	2		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193304-2 WG1193304-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	52		51		30-150	A
Decachlorobiphenyl	24	Q	22	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		50		30-150	B
Decachlorobiphenyl	25	Q	25	Q	30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193824-2 WG1193824-3									
Delta-BHC	79		83		30-150	5		20	A
Lindane	78		83		30-150	6		20	A
Alpha-BHC	82		86		30-150	5		20	A
Beta-BHC	72		80		30-150	10		20	A
Heptachlor	72		76		30-150	6		20	A
Aldrin	76		80		30-150	5		20	A
Heptachlor epoxide	77		83		30-150	7		20	A
Endrin	78		82		30-150	6		20	A
Endrin aldehyde	74		78		30-150	5		20	A
Endrin ketone	79		82		30-150	4		20	A
Dieldrin	83		88		30-150	5		20	A
4,4'-DDE	76		82		30-150	7		20	A
4,4'-DDD	76		81		30-150	6		20	A
4,4'-DDT	78		84		30-150	8		20	A
Endosulfan I	74		78		30-150	6		20	A
Endosulfan II	73		77		30-150	5		20	A
Endosulfan sulfate	69		73		30-150	6		20	A
Methoxychlor	87		90		30-150	4		20	A
cis-Chlordane	66		67		30-150	0		20	A
trans-Chlordane	73		78		30-150	6		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 13 Batch: WG1193824-2 WG1193824-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	64		67		30-150	A
Decachlorobiphenyl	38		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		74		30-150	B
Decachlorobiphenyl	42		41		30-150	B

METALS

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4080		mg/kg	8.79	2.37	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Antimony, Total	2.14	J	mg/kg	4.39	0.334	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Arsenic, Total	8.66		mg/kg	0.879	0.183	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Barium, Total	647		mg/kg	0.879	0.153	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Beryllium, Total	0.211	J	mg/kg	0.439	0.029	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Cadmium, Total	1.12		mg/kg	0.879	0.086	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Calcium, Total	61900		mg/kg	8.79	3.08	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Chromium, Total	19.1		mg/kg	0.879	0.084	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Cobalt, Total	4.34		mg/kg	1.76	0.146	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Copper, Total	73.5		mg/kg	0.879	0.227	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Iron, Total	10200		mg/kg	4.39	0.794	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Lead, Total	976		mg/kg	4.39	0.236	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Magnesium, Total	4850		mg/kg	8.79	1.35	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Manganese, Total	219		mg/kg	0.879	0.140	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Mercury, Total	0.514		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 20:37	EPA 7471B	1,7471B	EA
Nickel, Total	15.7		mg/kg	2.20	0.213	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Potassium, Total	830		mg/kg	220	12.6	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Selenium, Total	0.492	J	mg/kg	1.76	0.227	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.879	0.249	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Sodium, Total	360		mg/kg	176	2.77	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.76	0.277	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Vanadium, Total	27.3		mg/kg	0.879	0.178	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
Zinc, Total	731		mg/kg	4.39	0.257	2	12/27/18 19:30	01/02/19 20:10	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	19		mg/kg	0.89	0.89	1		01/02/19 20:10	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02

Date Collected: 12/21/18 09:40

Client ID: RB05_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7460		mg/kg	8.90	2.40	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Antimony, Total	0.498	J	mg/kg	4.45	0.338	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Arsenic, Total	3.18		mg/kg	0.890	0.185	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Barium, Total	75.1		mg/kg	0.890	0.155	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Beryllium, Total	0.365	J	mg/kg	0.445	0.029	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Cadmium, Total	0.089	J	mg/kg	0.890	0.087	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Calcium, Total	14400		mg/kg	8.90	3.12	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Chromium, Total	35.2		mg/kg	0.890	0.086	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Cobalt, Total	8.17		mg/kg	1.78	0.148	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Copper, Total	188		mg/kg	0.890	0.230	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Iron, Total	13600		mg/kg	4.45	0.804	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Lead, Total	79.4		mg/kg	4.45	0.238	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Magnesium, Total	5980		mg/kg	8.90	1.37	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Manganese, Total	329		mg/kg	0.890	0.142	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Mercury, Total	0.688		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 20:39	EPA 7471B	1,7471B	EA
Nickel, Total	30.1		mg/kg	2.22	0.215	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Potassium, Total	2050		mg/kg	222	12.8	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.78	0.230	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.890	0.252	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Sodium, Total	121	J	mg/kg	178	2.80	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.78	0.280	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Vanadium, Total	21.4		mg/kg	0.890	0.181	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
Zinc, Total	208		mg/kg	4.45	0.261	2	12/27/18 19:30	01/02/19 20:35	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	35		mg/kg	0.89	0.89	1		01/02/19 20:35	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6640		mg/kg	8.47	2.29	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Antimony, Total	0.712	J	mg/kg	4.24	0.322	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Arsenic, Total	4.26		mg/kg	0.847	0.176	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Barium, Total	96.2		mg/kg	0.847	0.147	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Beryllium, Total	0.322	J	mg/kg	0.424	0.028	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.847	0.083	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Calcium, Total	7990		mg/kg	8.47	2.96	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Chromium, Total	16.3		mg/kg	0.847	0.081	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Cobalt, Total	8.39		mg/kg	1.69	0.141	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Copper, Total	26.3		mg/kg	0.847	0.218	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Iron, Total	17200		mg/kg	4.24	0.765	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Lead, Total	191		mg/kg	4.24	0.227	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Magnesium, Total	3230		mg/kg	8.47	1.30	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Manganese, Total	160		mg/kg	0.847	0.135	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Mercury, Total	1.11		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 20:41	EPA 7471B	1,7471B	EA
Nickel, Total	16.0		mg/kg	2.12	0.205	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Potassium, Total	2310		mg/kg	212	12.2	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Selenium, Total	0.788	J	mg/kg	1.69	0.218	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.847	0.240	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Sodium, Total	77.0	J	mg/kg	169	2.67	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.69	0.267	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Vanadium, Total	20.2		mg/kg	0.847	0.172	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
Zinc, Total	103		mg/kg	4.24	0.248	2	12/27/18 19:30	01/02/19 20:39	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	16		mg/kg	0.90	0.90	1		01/02/19 20:39	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-04

Date Collected: 12/21/18 10:00

Client ID: RB05_19-21

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6400		mg/kg	10.3	2.78	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Antimony, Total	1.45	J	mg/kg	5.16	0.392	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Arsenic, Total	7.68		mg/kg	1.03	0.214	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Barium, Total	101		mg/kg	1.03	0.180	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Beryllium, Total	0.330	J	mg/kg	0.516	0.034	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	1.03	0.101	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Calcium, Total	5060		mg/kg	10.3	3.61	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Chromium, Total	14.4		mg/kg	1.03	0.099	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Cobalt, Total	7.59		mg/kg	2.06	0.171	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Copper, Total	227		mg/kg	1.03	0.266	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Iron, Total	14200		mg/kg	5.16	0.932	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Lead, Total	268		mg/kg	5.16	0.276	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Magnesium, Total	2630		mg/kg	10.3	1.59	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Manganese, Total	163		mg/kg	1.03	0.164	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Mercury, Total	1.12		mg/kg	0.084	0.018	1	12/27/18 07:30	01/02/19 20:47	EPA 7471B	1,7471B	EA
Nickel, Total	13.6		mg/kg	2.58	0.250	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Potassium, Total	1640		mg/kg	258	14.8	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Selenium, Total	0.836	J	mg/kg	2.06	0.266	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	1.03	0.292	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Sodium, Total	128	J	mg/kg	206	3.25	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	2.06	0.325	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Vanadium, Total	20.6		mg/kg	1.03	0.209	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
Zinc, Total	130		mg/kg	5.16	0.302	2	12/27/18 19:30	01/02/19 20:44	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	1.1	1.1	1		01/02/19 20:44	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-05

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2970		mg/kg	9.01	2.43	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Antimony, Total	5.01		mg/kg	4.50	0.342	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Arsenic, Total	7.39		mg/kg	0.901	0.187	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Barium, Total	826		mg/kg	0.901	0.157	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Beryllium, Total	0.153	J	mg/kg	0.450	0.030	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Cadmium, Total	0.955		mg/kg	0.901	0.088	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Calcium, Total	56400		mg/kg	9.01	3.15	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Chromium, Total	11.4		mg/kg	0.901	0.087	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Cobalt, Total	3.08		mg/kg	1.80	0.150	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Copper, Total	14.2		mg/kg	0.901	0.232	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Iron, Total	5920		mg/kg	4.50	0.813	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Lead, Total	1120		mg/kg	4.50	0.241	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Magnesium, Total	4070		mg/kg	9.01	1.39	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Manganese, Total	163		mg/kg	0.901	0.143	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Mercury, Total	0.417		mg/kg	0.073	0.015	1	12/27/18 07:30	01/02/19 20:49	EPA 7471B	1,7471B	EA
Nickel, Total	5.39		mg/kg	2.25	0.218	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Potassium, Total	644		mg/kg	225	13.0	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Selenium, Total	0.333	J	mg/kg	1.80	0.232	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.901	0.255	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Sodium, Total	373		mg/kg	180	2.84	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.80	0.284	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Vanadium, Total	14.8		mg/kg	0.901	0.183	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
Zinc, Total	1190		mg/kg	4.50	0.264	2	12/27/18 19:30	01/02/19 21:11	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11	J	mg/kg	0.92	0.92	1		01/02/19 21:11	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-06

Date Collected: 12/21/18 12:40

Client ID: RB06_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5760		mg/kg	8.72	2.35	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Antimony, Total	1.01	J	mg/kg	4.36	0.331	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Arsenic, Total	7.04		mg/kg	0.872	0.181	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Barium, Total	91.5		mg/kg	0.872	0.152	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Beryllium, Total	0.331	J	mg/kg	0.436	0.029	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.872	0.085	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Calcium, Total	16900		mg/kg	8.72	3.05	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Chromium, Total	11.4		mg/kg	0.872	0.084	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Cobalt, Total	5.54		mg/kg	1.74	0.145	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Copper, Total	37.1		mg/kg	0.872	0.225	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Iron, Total	11400		mg/kg	4.36	0.787	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Lead, Total	539		mg/kg	4.36	0.234	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Magnesium, Total	2300		mg/kg	8.72	1.34	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Manganese, Total	245		mg/kg	0.872	0.139	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Mercury, Total	1.12		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 20:51	EPA 7471B	1,7471B	EA
Nickel, Total	15.8		mg/kg	2.18	0.211	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Potassium, Total	599		mg/kg	218	12.6	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Selenium, Total	0.331	J	mg/kg	1.74	0.225	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.872	0.247	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Sodium, Total	125	J	mg/kg	174	2.75	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.74	0.275	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Vanadium, Total	13.7		mg/kg	0.872	0.177	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
Zinc, Total	114		mg/kg	4.36	0.255	2	12/27/18 19:30	01/02/19 21:16	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11	J	mg/kg	0.90	0.90	1		01/02/19 21:16	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07

Date Collected: 12/21/18 12:50

Client ID: RB06_10-12

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 69%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	11200		mg/kg	11.5	3.10	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Antimony, Total	1.18	J	mg/kg	5.73	0.436	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Arsenic, Total	8.60		mg/kg	1.15	0.238	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Barium, Total	22.9		mg/kg	1.15	0.200	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Beryllium, Total	0.585		mg/kg	0.573	0.038	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	1.15	0.112	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Calcium, Total	2200		mg/kg	11.5	4.01	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Chromium, Total	22.9		mg/kg	1.15	0.110	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Cobalt, Total	9.16		mg/kg	2.29	0.190	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Copper, Total	9.15		mg/kg	1.15	0.296	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Iron, Total	23700		mg/kg	5.73	1.04	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Lead, Total	10.9		mg/kg	5.73	0.307	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Magnesium, Total	5660		mg/kg	11.5	1.77	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Manganese, Total	254		mg/kg	1.15	0.182	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.092	0.019	1	12/27/18 07:30	01/02/19 20:52	EPA 7471B	1,7471B	EA
Nickel, Total	18.8		mg/kg	2.87	0.278	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Potassium, Total	2390		mg/kg	287	16.5	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Selenium, Total	0.367	J	mg/kg	2.29	0.296	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	1.15	0.324	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Sodium, Total	233		mg/kg	229	3.61	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	2.29	0.361	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Vanadium, Total	29.0		mg/kg	1.15	0.233	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
Zinc, Total	59.2		mg/kg	5.73	0.336	2	12/27/18 19:30	01/02/19 21:20	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	23		mg/kg	1.2	1.2	1		01/02/19 21:20	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-08

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6460		mg/kg	8.82	2.38	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Antimony, Total	1.68	J	mg/kg	4.41	0.335	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Arsenic, Total	9.85		mg/kg	0.882	0.183	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Barium, Total	282		mg/kg	0.882	0.153	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Beryllium, Total	0.362	J	mg/kg	0.441	0.029	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.882	0.086	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Calcium, Total	39500		mg/kg	8.82	3.09	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Chromium, Total	12.7		mg/kg	0.882	0.085	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Cobalt, Total	6.49		mg/kg	1.76	0.146	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Copper, Total	18.5		mg/kg	0.882	0.228	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Iron, Total	12300		mg/kg	4.41	0.796	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Lead, Total	294		mg/kg	4.41	0.236	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Magnesium, Total	4440		mg/kg	8.82	1.36	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Manganese, Total	205		mg/kg	0.882	0.140	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Mercury, Total	0.506		mg/kg	0.071	0.015	1	12/27/18 07:30	01/02/19 20:54	EPA 7471B	1,7471B	EA
Nickel, Total	12.2		mg/kg	2.20	0.213	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Potassium, Total	1710		mg/kg	220	12.7	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Selenium, Total	0.494	J	mg/kg	1.76	0.228	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.882	0.250	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Sodium, Total	503		mg/kg	176	2.78	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.76	0.278	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Vanadium, Total	18.3		mg/kg	0.882	0.179	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
Zinc, Total	476		mg/kg	4.41	0.258	2	12/27/18 19:30	01/02/19 21:24	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	13		mg/kg	0.90	0.90	1		01/02/19 21:24	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-09

Date Collected: 12/21/18 13:40

Client ID: RB04_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6810		mg/kg	9.00	2.43	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Antimony, Total	0.774	J	mg/kg	4.50	0.342	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Arsenic, Total	3.56		mg/kg	0.900	0.187	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Barium, Total	49.8		mg/kg	0.900	0.157	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Beryllium, Total	0.324	J	mg/kg	0.450	0.030	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.900	0.088	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Calcium, Total	13600		mg/kg	9.00	3.15	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Chromium, Total	12.9		mg/kg	0.900	0.086	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Cobalt, Total	7.64		mg/kg	1.80	0.149	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Copper, Total	18.4		mg/kg	0.900	0.232	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Iron, Total	16700		mg/kg	4.50	0.813	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Lead, Total	72.0		mg/kg	4.50	0.241	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Magnesium, Total	8370		mg/kg	9.00	1.39	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Manganese, Total	284		mg/kg	0.900	0.143	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Mercury, Total	0.639		mg/kg	0.072	0.015	1	12/27/18 07:30	01/02/19 20:56	EPA 7471B	1,7471B	EA
Nickel, Total	12.5		mg/kg	2.25	0.218	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Potassium, Total	1210		mg/kg	225	13.0	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.80	0.232	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.900	0.255	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Sodium, Total	166	J	mg/kg	180	2.84	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.80	0.284	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Vanadium, Total	18.6		mg/kg	0.900	0.183	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB
Zinc, Total	129		mg/kg	4.50	0.264	2	12/27/18 19:30	01/02/19 21:28	EPA 3050B	1,6010D	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	13		mg/kg	0.91	0.91	1		01/02/19 21:28	NA	107,-	
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Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6240		mg/kg	9.14	2.47	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Antimony, Total	0.411	J	mg/kg	4.57	0.347	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Arsenic, Total	3.11		mg/kg	0.914	0.190	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Barium, Total	94.4		mg/kg	0.914	0.159	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Beryllium, Total	0.283	J	mg/kg	0.457	0.030	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.914	0.090	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Calcium, Total	18900		mg/kg	9.14	3.20	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Chromium, Total	14.0		mg/kg	0.914	0.088	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Cobalt, Total	6.24		mg/kg	1.83	0.152	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Copper, Total	19.9		mg/kg	0.914	0.236	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Iron, Total	13800		mg/kg	4.57	0.826	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Lead, Total	57.5		mg/kg	4.57	0.245	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Magnesium, Total	4830		mg/kg	9.14	1.41	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Manganese, Total	295		mg/kg	0.914	0.145	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Mercury, Total	0.553		mg/kg	0.072	0.015	1	12/27/18 07:30	01/02/19 20:58	EPA 7471B	1,7471B	EA
Nickel, Total	11.1		mg/kg	2.28	0.221	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Potassium, Total	1720		mg/kg	228	13.2	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Selenium, Total	0.247	J	mg/kg	1.83	0.236	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.914	0.259	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Sodium, Total	164	J	mg/kg	183	2.88	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.83	0.288	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Vanadium, Total	15.0		mg/kg	0.914	0.186	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
Zinc, Total	67.8		mg/kg	4.57	0.268	2	12/27/18 19:30	01/02/19 21:32	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	0.92	0.92	1		01/02/19 21:32	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-11
 Client ID: SODUP01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 00:00
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4850		mg/kg	8.60	2.32	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Antimony, Total	0.550	J	mg/kg	4.30	0.327	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Arsenic, Total	1.90		mg/kg	0.860	0.179	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Barium, Total	32.8		mg/kg	0.860	0.150	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Beryllium, Total	0.241	J	mg/kg	0.430	0.028	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.860	0.084	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Calcium, Total	9970		mg/kg	8.60	3.01	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Chromium, Total	10.6		mg/kg	0.860	0.083	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Cobalt, Total	6.15		mg/kg	1.72	0.143	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Copper, Total	28.4		mg/kg	0.860	0.222	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Iron, Total	11900		mg/kg	4.30	0.776	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Lead, Total	32.5		mg/kg	4.30	0.230	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Magnesium, Total	6470		mg/kg	8.60	1.32	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Manganese, Total	205		mg/kg	0.860	0.137	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Mercury, Total	0.277		mg/kg	0.070	0.015	1	12/27/18 07:30	01/02/19 21:00	EPA 7471B	1,7471B	EA
Nickel, Total	8.80		mg/kg	2.15	0.208	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Potassium, Total	1020		mg/kg	215	12.4	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.72	0.222	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.860	0.243	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Sodium, Total	137	J	mg/kg	172	2.71	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.72	0.271	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Vanadium, Total	16.1		mg/kg	0.860	0.174	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
Zinc, Total	39.9		mg/kg	4.30	0.252	2	12/27/18 19:30	01/02/19 21:36	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	10	J	mg/kg	0.88	0.88	1		01/02/19 21:36	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-13
 Client ID: SOFB01_122118
 Sample Location: BRONX, NY

Date Collected: 12/21/18 14:45
 Date Received: 12/21/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.100	0.032	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Antimony, Total	ND		mg/l	0.050	0.007	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Arsenic, Total	ND		mg/l	0.005	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Barium, Total	0.002	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Beryllium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Cadmium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Calcium, Total	ND		mg/l	0.100	0.035	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Chromium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Cobalt, Total	ND		mg/l	0.020	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Copper, Total	0.003	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Iron, Total	ND		mg/l	0.050	0.009	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Lead, Total	ND		mg/l	0.010	0.003	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Magnesium, Total	ND		mg/l	0.100	0.015	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Manganese, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/02/19 11:01	01/02/19 16:46	EPA 7470A	1,7470A	MG
Nickel, Total	ND		mg/l	0.025	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Potassium, Total	ND		mg/l	2.50	0.237	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Selenium, Total	ND		mg/l	0.010	0.004	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Silver, Total	ND		mg/l	0.007	0.003	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Sodium, Total	ND		mg/l	2.00	0.120	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Thallium, Total	ND		mg/l	0.020	0.003	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Vanadium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
Zinc, Total	ND		mg/l	0.050	0.002	1	01/02/19 12:55	01/03/19 09:33	EPA 3005A	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/03/19 09:33	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-14

Date Collected: 12/21/18 14:00

Client ID: RB04_18-20

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5930		mg/kg	8.79	2.37	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.40	0.334	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Arsenic, Total	2.52		mg/kg	0.879	0.183	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Barium, Total	58.2		mg/kg	0.879	0.153	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Beryllium, Total	0.211	J	mg/kg	0.440	0.029	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.879	0.086	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Calcium, Total	14600		mg/kg	8.79	3.08	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Chromium, Total	11.4		mg/kg	0.879	0.084	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Cobalt, Total	7.18		mg/kg	1.76	0.146	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Copper, Total	18.4		mg/kg	0.879	0.227	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Iron, Total	11400		mg/kg	4.40	0.794	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Lead, Total	52.2		mg/kg	4.40	0.236	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Magnesium, Total	4470		mg/kg	8.79	1.35	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Manganese, Total	269		mg/kg	0.879	0.140	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Mercury, Total	0.242		mg/kg	0.072	0.015	1	12/27/18 07:30	01/02/19 21:02	EPA 7471B	1,7471B	EA
Nickel, Total	11.6		mg/kg	2.20	0.213	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Potassium, Total	2540		mg/kg	220	12.7	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Selenium, Total	0.325	J	mg/kg	1.76	0.227	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.879	0.249	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Sodium, Total	205		mg/kg	176	2.77	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.76	0.277	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Vanadium, Total	15.5		mg/kg	0.879	0.178	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
Zinc, Total	43.4		mg/kg	4.40	0.258	2	12/27/18 19:30	01/02/19 21:41	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.91	0.91	1		01/02/19 21:41	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11,14 Batch: WG1192962-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	12/27/18 07:30	01/02/19 20:10	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 01-11,14 Batch: WG1193229-1										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Antimony, Total	ND	mg/kg	2.00	0.152	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Barium, Total	ND	mg/kg	0.400	0.070	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Calcium, Total	ND	mg/kg	4.00	1.40	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Chromium, Total	ND	mg/kg	0.400	0.038	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Cobalt, Total	ND	mg/kg	0.800	0.066	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Copper, Total	ND	mg/kg	0.400	0.103	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Iron, Total	0.672	J	mg/kg	2.00	0.361	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Manganese, Total	ND	mg/kg	0.400	0.064	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Nickel, Total	ND	mg/kg	1.00	0.097	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Potassium, Total	ND	mg/kg	100	5.76	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Selenium, Total	ND	mg/kg	0.800	0.103	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Silver, Total	ND	mg/kg	0.400	0.113	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Sodium, Total	ND	mg/kg	80.0	1.26	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Thallium, Total	ND	mg/kg	0.800	0.126	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	
Zinc, Total	ND	mg/kg	2.00	0.117	1	12/27/18 19:30	01/02/19 19:20	1,6010D	AB	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 13 Batch: WG1193992-1									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	01/02/19 11:01	01/02/19 16:42	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 13 Batch: WG1194043-1										
Aluminum, Total	ND	mg/l	0.100	0.032	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Antimony, Total	ND	mg/l	0.050	0.007	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Arsenic, Total	ND	mg/l	0.005	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Barium, Total	ND	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Beryllium, Total	ND	mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Cadmium, Total	ND	mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Calcium, Total	ND	mg/l	0.100	0.035	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Chromium, Total	ND	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Cobalt, Total	ND	mg/l	0.020	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Copper, Total	0.004	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Iron, Total	ND	mg/l	0.050	0.009	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Lead, Total	ND	mg/l	0.010	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Magnesium, Total	ND	mg/l	0.100	0.015	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Manganese, Total	ND	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Nickel, Total	ND	mg/l	0.025	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Potassium, Total	ND	mg/l	2.50	0.237	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Selenium, Total	ND	mg/l	0.010	0.004	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Silver, Total	ND	mg/l	0.007	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Sodium, Total	ND	mg/l	2.00	0.120	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Thallium, Total	ND	mg/l	0.020	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	
Vanadium, Total	ND	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Zinc, Total	ND	mg/l	0.050	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
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Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 Batch: WG1192962-2 SRM Lot Number: D102-540								
Mercury, Total	108		-		65-134	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 Batch: WG1193229-2 SRM Lot Number: D102-540					
Aluminum, Total	67	-	49-150	-	
Antimony, Total	123	-	1-199	-	
Arsenic, Total	92	-	83-117	-	
Barium, Total	87	-	83-118	-	
Beryllium, Total	90	-	83-116	-	
Cadmium, Total	92	-	83-118	-	
Calcium, Total	82	-	82-118	-	
Chromium, Total	83	-	83-117	-	
Cobalt, Total	90	-	84-116	-	
Copper, Total	88	-	84-116	-	
Iron, Total	78	-	61-139	-	
Lead, Total	83	-	82-118	-	
Magnesium, Total	81	-	76-124	-	
Manganese, Total	82	-	82-118	-	
Nickel, Total	86	-	83-117	-	
Potassium, Total	82	-	70-130	-	
Selenium, Total	91	-	79-121	-	
Silver, Total	86	-	80-120	-	
Sodium, Total	102	-	74-126	-	
Thallium, Total	98	-	81-119	-	
Vanadium, Total	84	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 Batch: WG1193229-2 SRM Lot Number: D102-540					
Zinc, Total	87	-	81-118	-	
Total Metals - Mansfield Lab Associated sample(s): 13 Batch: WG1193992-2					
Mercury, Total	94	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 Batch: WG1194043-2					
Aluminum, Total	111	-	80-120	-	
Antimony, Total	98	-	80-120	-	
Arsenic, Total	115	-	80-120	-	
Barium, Total	105	-	80-120	-	
Beryllium, Total	104	-	80-120	-	
Cadmium, Total	111	-	80-120	-	
Calcium, Total	108	-	80-120	-	
Chromium, Total	104	-	80-120	-	
Cobalt, Total	103	-	80-120	-	
Copper, Total	102	-	80-120	-	
Iron, Total	112	-	80-120	-	
Lead, Total	110	-	80-120	-	
Magnesium, Total	112	-	80-120	-	
Manganese, Total	102	-	80-120	-	
Nickel, Total	104	-	80-120	-	
Potassium, Total	109	-	80-120	-	
Selenium, Total	118	-	80-120	-	
Silver, Total	110	-	80-120	-	
Sodium, Total	115	-	80-120	-	
Thallium, Total	109	-	80-120	-	
Vanadium, Total	107	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 Batch: WG1194043-2					
Zinc, Total	110	-	80-120	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MS Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1192962-3 QC Sample: L1852815-01 Client ID: MS Sample												
Mercury, Total	0.298	0.18	0.575	154	Q	-	-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1193229-3 QC Sample: L1852926-01 Client ID: RB05_0-2									
Aluminum, Total	4080	176	4120	23	Q	-	75-125	-	20
Antimony, Total	2.14J	44	38.2	87		-	75-125	-	20
Arsenic, Total	8.66	10.6	19.3	101		-	75-125	-	20
Barium, Total	647	176	1210	320	Q	-	75-125	-	20
Beryllium, Total	0.211J	4.4	4.28	97		-	75-125	-	20
Cadmium, Total	1.12	4.49	5.37	95		-	75-125	-	20
Calcium, Total	61900	881	70600	988	Q	-	75-125	-	20
Chromium, Total	19.1	17.6	39.4	115		-	75-125	-	20
Cobalt, Total	4.34	44	43.2	88		-	75-125	-	20
Copper, Total	73.5	22	90.6	78		-	75-125	-	20
Iron, Total	10200	88.1	9020	0	Q	-	75-125	-	20
Lead, Total	976	44.9	1740	1700	Q	-	75-125	-	20
Magnesium, Total	4850	881	5480	72	Q	-	75-125	-	20
Manganese, Total	219	44	291	163	Q	-	75-125	-	20
Nickel, Total	15.7	44	48.8	75		-	75-125	-	20
Potassium, Total	830	881	1720	101		-	75-125	-	20
Selenium, Total	0.492J	10.6	10.5	99		-	75-125	-	20
Silver, Total	ND	26.4	28.1	106		-	75-125	-	20
Sodium, Total	360	881	1190	94		-	75-125	-	20
Thallium, Total	ND	10.6	8.19	77		-	75-125	-	20
Vanadium, Total	27.3	44	69.0	95		-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1193229-3 QC Sample: L1852926-01 Client ID: RB05_0-2									
Zinc, Total	731	44	940	474	Q	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1193992-3 QC Sample: L1852926-13 Client ID: SOFB01_122118									
Mercury, Total	ND	0.005	0.00431	86	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1194043-3 QC Sample: L1852881-01 Client ID: MS Sample									
Aluminum, Total	0.139	2	2.39	112	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.523	105	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.138	115	-	-	75-125	-	20
Barium, Total	0.004J	2	2.13	106	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.053	106	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.057	112	-	-	75-125	-	20
Calcium, Total	7.51	10	19.2	117	-	-	75-125	-	20
Chromium, Total	ND	0.2	0.212	106	-	-	75-125	-	20
Cobalt, Total	0.002J	0.5	0.523	105	-	-	75-125	-	20
Copper, Total	0.005J	0.25	0.261	104	-	-	75-125	-	20
Iron, Total	0.151	1	1.29	114	-	-	75-125	-	20
Lead, Total	ND	0.51	0.562	110	-	-	75-125	-	20
Magnesium, Total	1.50	10	12.7	112	-	-	75-125	-	20
Manganese, Total	0.018	0.5	0.530	102	-	-	75-125	-	20
Nickel, Total	0.007J	0.5	0.529	106	-	-	75-125	-	20
Potassium, Total	0.529J	10	11.4	114	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.142	118	-	-	75-125	-	20
Silver, Total	ND	0.05	0.054	108	-	-	75-125	-	20
Sodium, Total	2.04	10	13.4	114	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.131	109	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.539	108	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1194043-3 QC Sample: L1852881-01 Client ID: MS Sample									
Zinc, Total	0.010J	0.5	0.566	113	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1192962-4 QC Sample: L1852815-01 Client ID: DUP Sample						
Mercury, Total	0.298	0.305	mg/kg	2		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1193229-4 QC Sample: L1852926-01 Client ID: RB05_0-2					
Aluminum, Total	4080	4010	mg/kg	2	20
Antimony, Total	2.14J	2.12J	mg/kg	NC	20
Arsenic, Total	8.66	8.07	mg/kg	7	20
Barium, Total	647	540	mg/kg	18	20
Beryllium, Total	0.211J	0.208J	mg/kg	NC	20
Cadmium, Total	1.12	1.08	mg/kg	4	20
Calcium, Total	61900	63200	mg/kg	2	20
Chromium, Total	19.1	17.6	mg/kg	8	20
Cobalt, Total	4.34	4.64	mg/kg	7	20
Copper, Total	73.5	68.8	mg/kg	7	20
Iron, Total	10200	12700	mg/kg	22	Q 20
Lead, Total	976	876	mg/kg	11	20
Magnesium, Total	4850	5510	mg/kg	13	20
Manganese, Total	219	234	mg/kg	7	20
Nickel, Total	15.7	13.7	mg/kg	14	20
Potassium, Total	830	866	mg/kg	4	20
Selenium, Total	0.492J	0.659J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	360	343	mg/kg	5	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11,14 QC Batch ID: WG1193229-4 QC Sample: L1852926-01 Client ID: RB05_0-2					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	27.3	27.2	mg/kg	0	20
Zinc, Total	731	761	mg/kg	4	20
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1193992-4 QC Sample: L1852926-13 Client ID: SOFB01_122118					
Mercury, Total	ND	ND	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 13 QC Batch ID: WG1194043-4 QC Sample: L1852881-01 Client ID: DUP Sample					
Iron, Total	0.151	0.154	mg/l	2	20
Manganese, Total	0.018	0.019	mg/l	2	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-01

Date Collected: 12/21/18 09:35

Client ID: RB05_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.1		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.34	J	mg/kg	1.1	0.23	1	12/22/18 16:10	12/26/18 14:42	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.888	0.178	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-02

Date Collected: 12/21/18 09:40

Client ID: RB05_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.5		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	12/22/18 16:10	12/26/18 14:53	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.894	0.179	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-03

Date Collected: 12/21/18 09:50

Client ID: RB05_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.3		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/22/18 16:10	12/26/18 14:54	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.896	0.179	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-04

Date Collected: 12/21/18 10:00

Client ID: RB05_19-21

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	75.2		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.3	0.27	1	12/22/18 16:10	12/26/18 14:55	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.06	0.213	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-05

Date Collected: 12/21/18 12:30

Client ID: RB06_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.6		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.92	J	mg/kg	1.1	0.24	1	12/22/18 16:10	12/26/18 14:56	1,9010C/9012B	LH
Chromium, Hexavalent	0.716	J	mg/kg	0.924	0.185	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-06

Date Collected: 12/21/18 12:40

Client ID: RB06_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.2		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	1.1		mg/kg	1.0	0.22	1	12/22/18 16:10	12/26/18 14:57	1,9010C/9012B	LH
Chromium, Hexavalent	0.190	J	mg/kg	0.897	0.179	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-07

Date Collected: 12/21/18 12:50

Client ID: RB06_10-12

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	68.5		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.4	0.30	1	12/22/18 16:10	12/26/18 14:58	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.17	0.234	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-08

Date Collected: 12/21/18 13:30

Client ID: RB04_0-2

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.8		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.35	J	mg/kg	1.1	0.24	1	12/22/18 16:10	12/26/18 15:14	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.901	0.180	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-09

Date Collected: 12/21/18 13:40

Client ID: RB04_8-10

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.6		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/26/18 11:10	12/27/18 12:37	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.913	0.183	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-10

Date Collected: 12/21/18 13:50

Client ID: RB04_13-15

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.6		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.39	J	mg/kg	1.1	0.24	1	12/26/18 11:10	12/27/18 12:04	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.924	0.185	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-11

Date Collected: 12/21/18 00:00

Client ID: SODUP01_122118

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.8		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/26/18 11:10	12/27/18 12:05	1,9010C/9012B	LH
Chromium, Hexavalent	0.430	J	mg/kg	0.881	0.176	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1852926-13

Date Collected: 12/21/18 14:45

Client ID: SOFB01_122118

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/22/18 12:15	12/26/18 12:28	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	12/22/18 07:45	12/22/18 08:00	1,7196A	MA



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1852926-14

Date Collected: 12/21/18 14:00

Client ID: RB04_18-20

Date Received: 12/21/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.8		%	0.100	NA	1	-	12/26/18 14:03	121,2540G	RI
Cyanide, Total	0.25	J	mg/kg	1.1	0.22	1	12/26/18 11:10	12/27/18 12:06	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.911	0.182	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 13 Batch: WG1192356-1									
Chromium, Hexavalent	ND	mg/l	0.010	0.003	1	12/22/18 07:45	12/22/18 08:00	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 13 Batch: WG1192406-1									
Cyanide, Total	ND	mg/l	0.005	0.001	1	12/22/18 12:15	12/26/18 12:04	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG1192428-1									
Cyanide, Total	ND	mg/kg	0.92	0.20	1	12/22/18 12:55	12/26/18 14:13	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 09-11,14 Batch: WG1192704-1									
Cyanide, Total	ND	mg/kg	0.84	0.18	1	12/26/18 11:10	12/27/18 11:46	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG1192810-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH
General Chemistry - Westborough Lab for sample(s): 11,14 Batch: WG1192812-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	12/23/18 17:04	12/27/18 11:04	1,7196A	NH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 13 Batch: WG1192356-2								
Chromium, Hexavalent	92		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 13 Batch: WG1192406-2 WG1192406-3								
Cyanide, Total	95		96		85-115	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG1192428-2 WG1192428-3								
Cyanide, Total	73	Q	78	Q	80-120	4		35
General Chemistry - Westborough Lab Associated sample(s): 09-11,14 Batch: WG1192704-2 WG1192704-3								
Cyanide, Total	81		72	Q	80-120	11		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1192810-2								
Chromium, Hexavalent	83		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 11,14 Batch: WG1192812-2								
Chromium, Hexavalent	83		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 13 QC Batch ID: WG1192356-4 QC Sample: L1852926-13 Client ID: SOFB01_122118												
Chromium, Hexavalent	ND	0.1	0.095	95	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 13 QC Batch ID: WG1192406-4 WG1192406-5 QC Sample: L1852588-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.184	92	0.187	94	94	80-120	2	2	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1192428-4 WG1192428-5 QC Sample: L1852926-01 Client ID: RB05_0-2												
Cyanide, Total	0.34J	10	11	100	10	91	91	75-125	10	10	-	35
General Chemistry - Westborough Lab Associated sample(s): 09-11,14 QC Batch ID: WG1192704-4 WG1192704-5 QC Sample: L1852926-09 Client ID: RB04_8-10												
Cyanide, Total	ND	11	11	98	10	88	88	75-125	10	10	-	35
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1192810-4 QC Sample: L1852926-10 Client ID: RB04_13-15												
Chromium, Hexavalent	ND	1400	ND	0	Q	-	-	-	75-125	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 11,14 QC Batch ID: WG1192812-4 QC Sample: L1852926-14 Client ID: RB04_18-20												
Chromium, Hexavalent	ND	1040	830	80	-	-	-	-	75-125	-	-	20



Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1852926

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 13 QC Batch ID: WG1192356-3 QC Sample: L1852926-13 Client ID: SOFB01_122118						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-11,14 QC Batch ID: WG1192773-1 QC Sample: L1852926-01 Client ID: RB05_0-2						
Solids, Total	90.1	91.0	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1192810-6 QC Sample: L1852926-10 Client ID: RB04_13-15						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 11,14 QC Batch ID: WG1192812-6 QC Sample: L1852926-14 Client ID: RB04_18-20						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-01A	Vial MeOH preserved	B	NA		4.8	Y	Absent		NYTCL-8260HLW(14)
L1852926-01B	Vial water preserved	B	NA		4.8	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-01C	Vial water preserved	B	NA		4.8	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-01D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-01F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-01G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-02A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-02B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-02C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-02D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-02F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-02G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-03A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-03B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-03C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-03D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-03E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-03F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-03G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-04A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-04B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-04C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-04D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-04F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-04G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-05A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-05B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-05C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-05D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-05E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-05F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-05G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-06A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-06B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-06C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-06D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-06F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-06G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-07A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-07B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-07C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-07D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-07F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-07G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-08A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-08B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-08C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-08D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1852926

Project Number: 170487001

Report Date: 01/04/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-08E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-08F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-08G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-09A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-09B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-09C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-09D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-09E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-09F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-09G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-10A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)
L1852926-10B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-10C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-10D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-10E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-10F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-10G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-11A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-11B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-11C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-11D	Plastic 2oz unpreserved for TS	B	NA		4.8	Y	Absent		TS(7)
L1852926-11E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-11F	Glass 120ml/4oz unpreserved	B	NA		4.8	Y	Absent		HEXCR-7196(30)
L1852926-11G	Glass 500ml/16oz unpreserved	B	NA		4.8	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)
L1852926-12A	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-12B	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-13A	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-13B	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-13C	Vial HCl preserved	A	NA		4.7	Y	Absent		NYTCL-8260(14)
L1852926-13D	Plastic 500ml HNO3 preserved	B	<2	<2	4.8	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-13E	Plastic 250ml NaOH preserved	B	7	7	4.8	Y	Absent		TCN-9010(14)
L1852926-13F	Plastic 500ml unpreserved	B	7	7	4.8	Y	Absent		HEXCR-7196(1)
L1852926-13G	Glass 120ml/4oz unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8081(7)
L1852926-13H	Glass 120ml/4oz unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8081(7)
L1852926-13I	Glass 120ml/4oz unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8082-LVI(7)
L1852926-13J	Glass 120ml/4oz unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8082-LVI(7)
L1852926-13K	Amber 250ml unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1852926-13L	Amber 250ml unpreserved	B	7	7	4.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1852926-13M	Amber 1000ml unpreserved	B	7	7	4.8	Y	Absent		HERB-APA(7)
L1852926-13N	Amber 1000ml unpreserved	B	7	7	4.8	Y	Absent		HERB-APA(7)
L1852926-14A	Vial MeOH preserved	A	NA		4.7	Y	Absent		NYTCL-8260HLW(14)

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1852926**Project Number:** 170487001**Report Date:** 01/04/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852926-14B	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-14C	Vial water preserved	A	NA		4.7	Y	Absent	22-DEC-18 05:34	NYTCL-8260HLW(14)
L1852926-14D	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L1852926-14E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1852926-14F	Glass 120ml/4oz unpreserved	A	NA		4.7	Y	Absent		HEXCR-7196(30)
L1852926-14G	Glass 500ml/16oz unpreserved	A	NA		4.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TRICR-CALC(30),NYTCL-8081(14),NYTCL-8082(14)

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1852926
Report Date: 01/04/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #																																																																								
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-02	RB05-8-10	↓	9:40 am	↓	JD.	X	X	X	X	X	X	X																																																																	
-03	RB05-13-15	↓	9:50 am	↓	JD.	X	X	X	X	X	X	X																																																																	
-04	RB05-19-21	↓	10:00 am	↓	JD.	X	X	X	X	X	X	X																																																																	
-05	RB06-0-2	↓	12:30 pm	↓	JD.	X	X	X	X	X	X	X																																																																	
-06	RB06-8-10	↓	12:40 pm	↓	JD.	X	X	X	X	X	X	X																																																																	
-07	RB06-10-12	↓	12:50 pm	↓	JD.	X	X	X	X	X	X	X																																																																	
-08	RB04-0-2	↓	13:20	↓	JD.	X	X	X	X	X	X	X																																																																	
-09	RB04-8-10	↓	13:40	↓	JD.	X	X	X	X	X	X	X																																																																	
-10	RB04-13-15	↓	13:50	↓	JD.	X	X	X	X	X	X	X																																																																	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																			
		Relinquished By:		Date/Time		Received By:		Date/Time																																																																					
		<i>JL</i>		12/21/18-15:35		<i>Paula Manella</i>		12/21/18 15:35																																																																					
		<i>Paula Manella</i>		12/22/18 00:35		<i>Wendy Storey</i>		12/22/18 01:35																																																																					

	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #										
			2 of 2	12/22/18	L1852926										
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input checked="" type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other											
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		(Use Project name as Project #) <input type="checkbox"/> Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input checked="" type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input checked="" type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input checked="" type="checkbox"/> Other <i>TAL</i> <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge											
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.		ANALYSIS		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:											
				Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)											
				Total Bottles											
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	total cyanide	Sample Specific Comments	
52926-01	SODUP01_122118	12/21/18	-	Soil	JD.	X	X	X	X	X	X	X	X		
-12	S0TB01_122118			TB	JD.	X									
-13	S0FB01_122118		14:45	FB	JD.	X	X	X	X	X	X	X	X		
-14	RB04_18-20		14:00	soil	JD.	X	X	X	X	X	X	X	X		
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative						Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
		Relinquished By:		Date/Time		Received By:		Date/Time							
		<i>Julia Leung</i>		12/21/18 - 15:35		<i>Paul Mappella</i>		12/21/18 15:35							
		<i>Paul Mappella</i>		12/22/18 00:35		<i>Paul Mappella</i>		12/21/18 19:50							



ANALYTICAL REPORT

Lab Number:	L1853110
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE + E. 146TH ST.
Project Number:	170487001
Report Date:	01/04/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1853110-01	RB03_17-18	SOIL	BRONX, NY	12/26/18 10:00	12/26/18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Pesticides

L1853110-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1853110-01: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L1853110-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1193398-2/-3 LCS/LCSD recoveries (65%/65%), associated with L1853110-01, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Hexavalent Chromium

The WG1193256-4 Insoluble MS recovery (0%), performed on L1853110-01, is below the acceptance criteria. The Soluble MS recovery (0%) was also below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 86%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Amita Naik

Title: Technical Director/Representative

Date: 01/04/19

ORGANICS

VOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 10:06
 Analyst: MV
 Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	310	140	1
1,1-Dichloroethane	ND		ug/kg	62	9.0	1
Chloroform	ND		ug/kg	93	8.6	1
Carbon tetrachloride	ND		ug/kg	62	14.	1
1,2-Dichloropropane	ND		ug/kg	62	7.7	1
Dibromochloromethane	ND		ug/kg	62	8.6	1
1,1,2-Trichloroethane	ND		ug/kg	62	16.	1
Tetrachloroethene	ND		ug/kg	31	12.	1
Chlorobenzene	ND		ug/kg	31	7.8	1
Trichlorofluoromethane	ND		ug/kg	250	43.	1
1,2-Dichloroethane	ND		ug/kg	62	16.	1
1,1,1-Trichloroethane	ND		ug/kg	31	10.	1
Bromodichloromethane	ND		ug/kg	31	6.7	1
trans-1,3-Dichloropropene	ND		ug/kg	62	17.	1
cis-1,3-Dichloropropene	ND		ug/kg	31	9.8	1
1,3-Dichloropropene, Total	ND		ug/kg	31	9.8	1
1,1-Dichloropropene	ND		ug/kg	31	9.8	1
Bromoform	ND		ug/kg	250	15.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	31	10.	1
Benzene	180		ug/kg	31	10.	1
Toluene	ND		ug/kg	62	34.	1
Ethylbenzene	97		ug/kg	62	8.7	1
Chloromethane	ND		ug/kg	250	58.	1
Bromomethane	ND		ug/kg	120	36.	1
Vinyl chloride	ND		ug/kg	62	21.	1
Chloroethane	ND		ug/kg	120	28.	1
1,1-Dichloroethene	ND		ug/kg	62	15.	1
trans-1,2-Dichloroethene	ND		ug/kg	93	8.5	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853110-01

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	31	8.5	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.9	1
1,3-Dichlorobenzene	ND		ug/kg	120	9.1	1
1,4-Dichlorobenzene	ND		ug/kg	120	10.	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	200		ug/kg	120	34.	1
o-Xylene	42	J	ug/kg	62	18.	1
Xylenes, Total	240	J	ug/kg	62	18.	1
cis-1,2-Dichloroethene	ND		ug/kg	62	11.	1
1,2-Dichloroethene, Total	ND		ug/kg	62	8.5	1
Dibromomethane	ND		ug/kg	120	15.	1
Styrene	ND		ug/kg	62	12.	1
Dichlorodifluoromethane	ND		ug/kg	620	56.	1
Acetone	ND		ug/kg	620	300	1
Carbon disulfide	ND		ug/kg	620	280	1
2-Butanone	ND		ug/kg	620	140	1
Vinyl acetate	ND		ug/kg	620	130	1
4-Methyl-2-pentanone	ND		ug/kg	620	79.	1
1,2,3-Trichloropropane	ND		ug/kg	120	7.8	1
2-Hexanone	ND		ug/kg	620	73.	1
Bromochloromethane	ND		ug/kg	120	13.	1
2,2-Dichloropropane	ND		ug/kg	120	12.	1
1,2-Dibromoethane	ND		ug/kg	62	17.	1
1,3-Dichloropropane	ND		ug/kg	120	10.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	31	8.2	1
Bromobenzene	ND		ug/kg	120	9.0	1
n-Butylbenzene	38	J	ug/kg	62	10.	1
sec-Butylbenzene	51	J	ug/kg	62	9.0	1
tert-Butylbenzene	ND		ug/kg	120	7.3	1
o-Chlorotoluene	ND		ug/kg	120	12.	1
p-Chlorotoluene	ND		ug/kg	120	6.7	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	180	62.	1
Hexachlorobutadiene	ND		ug/kg	250	10.	1
Isopropylbenzene	290		ug/kg	62	6.7	1
p-Isopropyltoluene	30	J	ug/kg	62	6.7	1
Naphthalene	1300		ug/kg	250	40.	1
Acrylonitrile	ND		ug/kg	250	71.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	390		ug/kg	62	10.	1
1,2,3-Trichlorobenzene	ND		ug/kg	120	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	17.	1
1,3,5-Trimethylbenzene	24	J	ug/kg	120	12.	1
1,2,4-Trimethylbenzene	710		ug/kg	120	21.	1
1,4-Dioxane	ND		ug/kg	6200	2200	1
p-Diethylbenzene	50	J	ug/kg	120	11.	1
p-Ethyltoluene	180		ug/kg	120	24.	1
1,2,4,5-Tetramethylbenzene	120		ug/kg	120	12.	1
Ethyl ether	ND		ug/kg	120	21.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	310	88.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	105		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/19 07:56
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1194817-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/04/19 07:56
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1194817-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/04/19 07:56
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1194817-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1194817-3 WG1194817-4								
Methylene chloride	86		84		70-130	2		30
1,1-Dichloroethane	87		86		70-130	1		30
Chloroform	95		95		70-130	0		30
Carbon tetrachloride	100		100		70-130	0		30
1,2-Dichloropropane	87		88		70-130	1		30
Dibromochloromethane	93		94		70-130	1		30
1,1,2-Trichloroethane	91		92		70-130	1		30
Tetrachloroethene	97		94		70-130	3		30
Chlorobenzene	93		92		70-130	1		30
Trichlorofluoromethane	74		75		70-139	1		30
1,2-Dichloroethane	87		89		70-130	2		30
1,1,1-Trichloroethane	102		101		70-130	1		30
Bromodichloromethane	101		102		70-130	1		30
trans-1,3-Dichloropropene	98		97		70-130	1		30
cis-1,3-Dichloropropene	104		105		70-130	1		30
1,1-Dichloropropene	102		100		70-130	2		30
Bromoform	91		92		70-130	1		30
1,1,2,2-Tetrachloroethane	94		95		70-130	1		30
Benzene	96		95		70-130	1		30
Toluene	93		91		70-130	2		30
Ethylbenzene	95		94		70-130	1		30
Chloromethane	71		68		52-130	4		30
Bromomethane	57		56	Q	57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1194817-3 WG1194817-4								
Vinyl chloride	70		70		67-130	0		30
Chloroethane	56		55		50-151	2		30
1,1-Dichloroethene	99		97		65-135	2		30
trans-1,2-Dichloroethene	98		96		70-130	2		30
Trichloroethene	98		98		70-130	0		30
1,2-Dichlorobenzene	90		89		70-130	1		30
1,3-Dichlorobenzene	91		90		70-130	1		30
1,4-Dichlorobenzene	90		89		70-130	1		30
Methyl tert butyl ether	101		103		66-130	2		30
p/m-Xylene	94		93		70-130	1		30
o-Xylene	97		95		70-130	2		30
cis-1,2-Dichloroethene	98		98		70-130	0		30
Dibromomethane	98		100		70-130	2		30
Styrene	87		87		70-130	0		30
Dichlorodifluoromethane	91		88		30-146	3		30
Acetone	109		101		54-140	8		30
Carbon disulfide	91		89		59-130	2		30
2-Butanone	80		93		70-130	15		30
Vinyl acetate	88		92		70-130	4		30
4-Methyl-2-pentanone	86		88		70-130	2		30
1,2,3-Trichloropropane	88		91		68-130	3		30
2-Hexanone	94		94		70-130	0		30
Bromochloromethane	98		99		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1194817-3 WG1194817-4								
2,2-Dichloropropane	103		102		70-130	1		30
1,2-Dibromoethane	96		97		70-130	1		30
1,3-Dichloropropane	94		94		69-130	0		30
1,1,1,2-Tetrachloroethane	96		96		70-130	0		30
Bromobenzene	93		92		70-130	1		30
n-Butylbenzene	94		92		70-130	2		30
sec-Butylbenzene	96		93		70-130	3		30
tert-Butylbenzene	96		94		70-130	2		30
o-Chlorotoluene	94		94		70-130	0		30
p-Chlorotoluene	96		96		70-130	0		30
1,2-Dibromo-3-chloropropane	95		98		68-130	3		30
Hexachlorobutadiene	92		89		67-130	3		30
Isopropylbenzene	97		95		70-130	2		30
p-Isopropyltoluene	96		94		70-130	2		30
Naphthalene	94		95		70-130	1		30
Acrylonitrile	75		78		70-130	4		30
n-Propylbenzene	94		92		70-130	2		30
1,2,3-Trichlorobenzene	92		92		70-130	0		30
1,2,4-Trichlorobenzene	93		92		70-130	1		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	97		95		70-130	2		30
1,4-Dioxane	90		94		65-136	4		30
p-Diethylbenzene	95		93		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853110

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1194817-3 WG1194817-4								
p-Ethyltoluene	100		98		70-130	2		30
1,2,4,5-Tetramethylbenzene	96		95		70-130	1		30
Ethyl ether	75		76		67-130	1		30
trans-1,4-Dichloro-2-butene	85		87		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		97		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	111		111		70-130
Dibromofluoromethane	102		104		70-130

SEMIVOLATILES

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853110-01 D

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 12/27/18 18:36

Analytical Date: 12/31/18 19:37

Analyst: JG

Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1900		ug/kg	330	42.	2
1,2,4-Trichlorobenzene	ND		ug/kg	410	47.	2
Hexachlorobenzene	ND		ug/kg	250	46.	2
Bis(2-chloroethyl)ether	ND		ug/kg	370	56.	2
2-Chloronaphthalene	ND		ug/kg	410	41.	2
1,2-Dichlorobenzene	ND		ug/kg	410	74.	2
1,3-Dichlorobenzene	ND		ug/kg	410	70.	2
1,4-Dichlorobenzene	ND		ug/kg	410	72.	2
3,3'-Dichlorobenzidine	ND		ug/kg	410	110	2
2,4-Dinitrotoluene	ND		ug/kg	410	82.	2
2,6-Dinitrotoluene	ND		ug/kg	410	70.	2
Fluoranthene	12000		ug/kg	250	47.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	410	44.	2
4-Bromophenyl phenyl ether	ND		ug/kg	410	62.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	490	70.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	440	41.	2
Hexachlorobutadiene	ND		ug/kg	410	60.	2
Hexachlorocyclopentadiene	ND		ug/kg	1200	370	2
Hexachloroethane	ND		ug/kg	330	66.	2
Isophorone	ND		ug/kg	370	53.	2
Naphthalene	2200		ug/kg	410	50.	2
Nitrobenzene	ND		ug/kg	370	61.	2
NDPA/DPA	ND		ug/kg	330	47.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	410	63.	2
Bis(2-ethylhexyl)phthalate	180	J	ug/kg	410	140	2
Butyl benzyl phthalate	ND		ug/kg	410	100	2
Di-n-butylphthalate	ND		ug/kg	410	78.	2
Di-n-octylphthalate	ND		ug/kg	410	140	2

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01 D

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	410	38.	2
Dimethyl phthalate	ND		ug/kg	410	86.	2
Benzo(a)anthracene	3500		ug/kg	250	46.	2
Benzo(a)pyrene	4700		ug/kg	330	100	2
Benzo(b)fluoranthene	4000		ug/kg	250	69.	2
Benzo(k)fluoranthene	1100		ug/kg	250	66.	2
Chrysene	3200		ug/kg	250	43.	2
Acenaphthylene	1700		ug/kg	330	63.	2
Anthracene	1500		ug/kg	250	80.	2
Benzo(ghi)perylene	4100		ug/kg	330	48.	2
Fluorene	1200		ug/kg	410	40.	2
Phenanthrene	1400		ug/kg	250	50.	2
Dibenzo(a,h)anthracene	310		ug/kg	250	47.	2
Indeno(1,2,3-cd)pyrene	3000		ug/kg	330	57.	2
Pyrene	16000		ug/kg	250	41.	2
Biphenyl	390	J	ug/kg	940	95.	2
4-Chloroaniline	ND		ug/kg	410	75.	2
2-Nitroaniline	ND		ug/kg	410	79.	2
3-Nitroaniline	ND		ug/kg	410	77.	2
4-Nitroaniline	ND		ug/kg	410	170	2
Dibenzofuran	170	J	ug/kg	410	39.	2
2-Methylnaphthalene	200	J	ug/kg	490	50.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	410	43.	2
Acetophenone	ND		ug/kg	410	51.	2
2,4,6-Trichlorophenol	ND		ug/kg	250	78.	2
p-Chloro-m-cresol	ND		ug/kg	410	61.	2
2-Chlorophenol	ND		ug/kg	410	48.	2
2,4-Dichlorophenol	ND		ug/kg	370	66.	2
2,4-Dimethylphenol	ND		ug/kg	410	140	2
2-Nitrophenol	ND		ug/kg	890	150	2
4-Nitrophenol	ND		ug/kg	570	170	2
2,4-Dinitrophenol	ND		ug/kg	2000	190	2
4,6-Dinitro-o-cresol	ND		ug/kg	1100	200	2
Pentachlorophenol	ND		ug/kg	330	90.	2
Phenol	ND		ug/kg	410	62.	2
2-Methylphenol	ND		ug/kg	410	64.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	590	64.	2

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01 D
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	410	78.	2
Benzoic Acid	ND		ug/kg	1300	420	2
Benzyl Alcohol	ND		ug/kg	410	120	2
Carbazole	170	J	ug/kg	410	40.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	74		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/28/18 09:42
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1193175-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/28/18 09:42
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1193175-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 12/28/18 09:42
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1193175-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		25-120
Phenol-d6	91		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	89		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193175-2 WG1193175-3								
Acenaphthene	80		82		31-137	2		50
1,2,4-Trichlorobenzene	82		88		38-107	7		50
Hexachlorobenzene	83		83		40-140	0		50
Bis(2-chloroethyl)ether	78		84		40-140	7		50
2-Chloronaphthalene	90		92		40-140	2		50
1,2-Dichlorobenzene	76		84		40-140	10		50
1,3-Dichlorobenzene	75		83		40-140	10		50
1,4-Dichlorobenzene	75		83		28-104	10		50
3,3'-Dichlorobenzidine	53		50		40-140	6		50
2,4-Dinitrotoluene	93		91		40-132	2		50
2,6-Dinitrotoluene	99		97		40-140	2		50
Fluoranthene	95		93		40-140	2		50
4-Chlorophenyl phenyl ether	83		82		40-140	1		50
4-Bromophenyl phenyl ether	86		84		40-140	2		50
Bis(2-chloroisopropyl)ether	80		83		40-140	4		50
Bis(2-chloroethoxy)methane	86		89		40-117	3		50
Hexachlorobutadiene	80		88		40-140	10		50
Hexachlorocyclopentadiene	81		86		40-140	6		50
Hexachloroethane	75		84		40-140	11		50
Isophorone	88		89		40-140	1		50
Naphthalene	82		86		40-140	5		50
Nitrobenzene	82		86		40-140	5		50
NDPA/DPA	87		85		36-157	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193175-2 WG1193175-3								
n-Nitrosodi-n-propylamine	85		88		32-121	3		50
Bis(2-ethylhexyl)phthalate	97		93		40-140	4		50
Butyl benzyl phthalate	100		97		40-140	3		50
Di-n-butylphthalate	99		96		40-140	3		50
Di-n-octylphthalate	100		94		40-140	6		50
Diethyl phthalate	86		84		40-140	2		50
Dimethyl phthalate	95		93		40-140	2		50
Benzo(a)anthracene	90		88		40-140	2		50
Benzo(a)pyrene	95		93		40-140	2		50
Benzo(b)fluoranthene	91		90		40-140	1		50
Benzo(k)fluoranthene	92		88		40-140	4		50
Chrysene	86		86		40-140	0		50
Acenaphthylene	93		92		40-140	1		50
Anthracene	92		93		40-140	1		50
Benzo(ghi)perylene	91		88		40-140	3		50
Fluorene	82		83		40-140	1		50
Phenanthrene	89		90		40-140	1		50
Dibenzo(a,h)anthracene	92		89		40-140	3		50
Indeno(1,2,3-cd)pyrene	95		91		40-140	4		50
Pyrene	93		91		35-142	2		50
Biphenyl	95		96		54-104	1		50
4-Chloroaniline	58		50		40-140	15		50
2-Nitroaniline	104		102		47-134	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193175-2 WG1193175-3								
3-Nitroaniline	62		62		26-129	0		50
4-Nitroaniline	86		86		41-125	0		50
Dibenzofuran	81		82		40-140	1		50
2-Methylnaphthalene	88		91		40-140	3		50
1,2,4,5-Tetrachlorobenzene	91		93		40-117	2		50
Acetophenone	90		94		14-144	4		50
2,4,6-Trichlorophenol	102		100		30-130	2		50
p-Chloro-m-cresol	100		100		26-103	0		50
2-Chlorophenol	89		94		25-102	5		50
2,4-Dichlorophenol	97		98		30-130	1		50
2,4-Dimethylphenol	96		96		30-130	0		50
2-Nitrophenol	95		98		30-130	3		50
4-Nitrophenol	93		90		11-114	3		50
2,4-Dinitrophenol	76		75		4-130	1		50
4,6-Dinitro-o-cresol	84		83		10-130	1		50
Pentachlorophenol	87		83		17-109	5		50
Phenol	90		93	Q	26-90	3		50
2-Methylphenol	94		96		30-130.	2		50
3-Methylphenol/4-Methylphenol	95		95		30-130	0		50
2,4,5-Trichlorophenol	104		99		30-130	5		50
Benzoic Acid	35		21		10-110	50		50
Benzyl Alcohol	90		94		40-140	4		50
Carbazole	95		94		54-128	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853110

Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193175-2 WG1193175-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	84		89		25-120
Phenol-d6	90		91		10-120
Nitrobenzene-d5	82		85		23-120
2-Fluorobiphenyl	88		87		30-120
2,4,6-Tribromophenol	86		83		10-136
4-Terphenyl-d14	89		86		18-120

PCBS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 18:21
 Analyst: HT
 Percent Solids: 80%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 18:42
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/29/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/30/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	40.4	3.58	1	A
Aroclor 1221	ND		ug/kg	40.4	4.05	1	A
Aroclor 1232	ND		ug/kg	40.4	8.56	1	A
Aroclor 1242	ND		ug/kg	40.4	5.44	1	A
Aroclor 1248	ND		ug/kg	40.4	6.06	1	A
Aroclor 1254	ND		ug/kg	40.4	4.42	1	A
Aroclor 1260	ND		ug/kg	40.4	7.46	1	A
Aroclor 1262	ND		ug/kg	40.4	5.13	1	A
Aroclor 1268	ND		ug/kg	40.4	4.18	1	A
PCBs, Total	ND		ug/kg	40.4	3.58	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	37		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	48		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 12/30/18 17:01
Analyst: AWS

Extraction Method: EPA 3546
Extraction Date: 12/27/18 06:08
Cleanup Method: EPA 3665A
Cleanup Date: 12/27/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1192973-1						
Aroclor 1016	ND		ug/kg	32.5	2.88	A
Aroclor 1221	ND		ug/kg	32.5	3.25	A
Aroclor 1232	ND		ug/kg	32.5	6.88	A
Aroclor 1242	ND		ug/kg	32.5	4.38	A
Aroclor 1248	ND		ug/kg	32.5	4.87	A
Aroclor 1254	ND		ug/kg	32.5	3.55	A
Aroclor 1260	ND		ug/kg	32.5	6.00	A
Aroclor 1262	ND		ug/kg	32.5	4.12	A
Aroclor 1268	ND		ug/kg	32.5	3.36	A
PCBs, Total	ND		ug/kg	32.5	2.88	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	71		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1192973-2 WG1192973-3									
Aroclor 1016	75		79		40-140	5		50	A
Aroclor 1260	69		71		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		79		30-150	A
Decachlorobiphenyl	71		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		83		30-150	B
Decachlorobiphenyl	75		76		30-150	B

PESTICIDES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 21:47
 Analyst: DGM
 Percent Solids: 80%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	204	12.8	1	A
2,4,5-T	ND		ug/kg	204	6.31	1	A
2,4,5-TP (Silvex)	ND		ug/kg	204	5.41	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	109		30-150	A
DCAA	112		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01 D
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 10:07
 Analyst: KEG
 Percent Solids: 80%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 18:39
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	37.9	7.42	20	A
Lindane	ND		ug/kg	15.8	7.06	20	A
Alpha-BHC	ND		ug/kg	15.8	4.48	20	A
Beta-BHC	ND		ug/kg	37.9	14.4	20	A
Heptachlor	ND		ug/kg	19.0	8.50	20	A
Aldrin	ND		ug/kg	37.9	13.3	20	A
Heptachlor epoxide	ND		ug/kg	71.1	21.3	20	A
Endrin	ND		ug/kg	15.8	6.48	20	A
Endrin aldehyde	ND		ug/kg	47.4	16.6	20	A
Endrin ketone	ND		ug/kg	37.9	9.76	20	A
Dieldrin	ND		ug/kg	23.7	11.8	20	A
4,4'-DDE	ND		ug/kg	37.9	8.76	20	A
4,4'-DDD	ND		ug/kg	37.9	13.5	20	A
4,4'-DDT	ND		ug/kg	71.1	30.5	20	A
Endosulfan I	ND		ug/kg	37.9	8.96	20	A
Endosulfan II	ND		ug/kg	37.9	12.7	20	A
Endosulfan sulfate	ND		ug/kg	15.8	7.52	20	A
Methoxychlor	ND		ug/kg	71.1	22.1	20	A
Toxaphene	ND		ug/kg	711	199.	20	A
cis-Chlordane	ND		ug/kg	47.4	13.2	20	A
trans-Chlordane	ND		ug/kg	47.4	12.5	20	A
Chlordane	ND		ug/kg	308	126.	20	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01 D
 Client ID: RB03_17-18
 Sample Location: BRONX, NY

Date Collected: 12/26/18 10:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/28/18 11:37
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 12/27/18 13:10
Cleanup Method: EPA 3620B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1193145-1						
Delta-BHC	ND		ug/kg	1.58	0.310	A
Lindane	ND		ug/kg	0.659	0.295	A
Alpha-BHC	ND		ug/kg	0.659	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.600	A
Heptachlor	ND		ug/kg	0.791	0.355	A
Aldrin	ND		ug/kg	1.58	0.557	A
Heptachlor epoxide	ND		ug/kg	2.97	0.890	A
Endrin	ND		ug/kg	0.659	0.270	A
Endrin aldehyde	ND		ug/kg	1.98	0.692	A
Endrin ketone	ND		ug/kg	1.58	0.407	A
Dieldrin	ND		ug/kg	0.989	0.494	A
4,4'-DDE	ND		ug/kg	1.58	0.366	A
4,4'-DDD	ND		ug/kg	1.58	0.564	A
4,4'-DDT	ND		ug/kg	2.97	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.374	A
Endosulfan II	ND		ug/kg	1.58	0.529	A
Endosulfan sulfate	ND		ug/kg	0.659	0.314	A
Methoxychlor	ND		ug/kg	2.97	0.923	A
Toxaphene	ND		ug/kg	29.7	8.30	A
cis-Chlordane	ND		ug/kg	1.98	0.551	A
trans-Chlordane	ND		ug/kg	1.98	0.522	A
Chlordane	ND		ug/kg	12.8	5.24	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**Analytical Method: 1,8081B
Analytical Date: 12/28/18 11:37
Analyst: JBExtraction Method: EPA 3546
Extraction Date: 12/27/18 13:10
Cleanup Method: EPA 3620B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1193145-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	111		30-150	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 12/31/18 06:23
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:06

Methylation Date: 12/28/18 08:43

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01 Batch: WG1193211-1						
2,4-D	ND		ug/kg	164	10.3	A
2,4,5-T	ND		ug/kg	164	5.07	A
2,4,5-TP (Silvex)	ND		ug/kg	164	4.35	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	89		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1193145-2 WG1193145-3									
Delta-BHC	100		108		30-150	8		30	A
Lindane	99		106		30-150	7		30	A
Alpha-BHC	107		106		30-150	1		30	A
Beta-BHC	88		95		30-150	8		30	A
Heptachlor	96		105		30-150	9		30	A
Aldrin	92		102		30-150	10		30	A
Heptachlor epoxide	103		114		30-150	10		30	A
Endrin	106		115		30-150	8		30	A
Endrin aldehyde	86		93		30-150	8		30	A
Endrin ketone	120		121		30-150	1		30	A
Dieldrin	111		121		30-150	9		30	A
4,4'-DDE	92		98		30-150	6		30	A
4,4'-DDD	103		116		30-150	12		30	A
4,4'-DDT	101		117		30-150	15		30	A
Endosulfan I	91		98		30-150	7		30	A
Endosulfan II	103		113		30-150	9		30	A
Endosulfan sulfate	98		97		30-150	1		30	A
Methoxychlor	104		107		30-150	3		30	A
cis-Chlordane	68		73		30-150	7		30	A
trans-Chlordane	76		70		30-150	8		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1193145-2 WG1193145-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	83		87		30-150	B
Decachlorobiphenyl	88		91		30-150	B
2,4,5,6-Tetrachloro-m-xylene	89		92		30-150	A
Decachlorobiphenyl	114		116		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1193211-2 WG1193211-3									
2,4-D	116		131		30-150	12		30	A
2,4,5-T	95		94		30-150	1		30	A
2,4,5-TP (Silvex)	82		82		30-150	0		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	97		100		30-150	A
DCAA	100		106		30-150	B



METALS

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853110**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853110-01

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5640		mg/kg	9.47	2.56	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.74	0.360	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Arsenic, Total	2.73		mg/kg	0.947	0.197	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Barium, Total	56.4		mg/kg	0.947	0.165	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Beryllium, Total	0.152	J	mg/kg	0.474	0.031	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Cadmium, Total	0.322	J	mg/kg	0.947	0.093	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Calcium, Total	6470		mg/kg	9.47	3.32	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Chromium, Total	17.1		mg/kg	0.947	0.091	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Cobalt, Total	6.08		mg/kg	1.89	0.157	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Copper, Total	20.5		mg/kg	0.947	0.244	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Iron, Total	11800		mg/kg	4.74	0.855	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Lead, Total	97.1		mg/kg	4.74	0.254	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Magnesium, Total	2770		mg/kg	9.47	1.46	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Manganese, Total	295		mg/kg	0.947	0.151	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Mercury, Total	0.716		mg/kg	0.078	0.017	1	12/28/18 06:00	01/03/19 21:00	EPA 7471B	1,7471B	EA
Nickel, Total	31.0		mg/kg	2.37	0.229	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Potassium, Total	1290		mg/kg	237	13.6	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Selenium, Total	0.606	J	mg/kg	1.89	0.244	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.947	0.268	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Sodium, Total	149	J	mg/kg	189	2.98	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.89	0.298	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Vanadium, Total	16.7		mg/kg	0.947	0.192	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
Zinc, Total	64.8		mg/kg	4.74	0.278	2	12/28/18 17:48	12/29/18 04:58	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	17		mg/kg	1.0	1.0	1		12/29/18 04:58	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1193349-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	12/28/18 06:00	01/03/19 20:33	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1193639-1										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Antimony, Total	ND	mg/kg	2.00	0.152	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Barium, Total	ND	mg/kg	0.400	0.070	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Calcium, Total	ND	mg/kg	4.00	1.40	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Chromium, Total	ND	mg/kg	0.400	0.038	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Cobalt, Total	ND	mg/kg	0.800	0.066	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Copper, Total	ND	mg/kg	0.400	0.103	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Iron, Total	ND	mg/kg	2.00	0.361	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Lead, Total	ND	mg/kg	2.00	0.107	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Manganese, Total	ND	mg/kg	0.400	0.064	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Nickel, Total	ND	mg/kg	1.00	0.097	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Potassium, Total	ND	mg/kg	100	5.76	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Selenium, Total	ND	mg/kg	0.800	0.103	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Silver, Total	ND	mg/kg	0.400	0.113	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Sodium, Total	1.49	J	mg/kg	80.0	1.26	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC
Thallium, Total	ND	mg/kg	0.800	0.126	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Zinc, Total	ND	mg/kg	2.00	0.117	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193349-2 SRM Lot Number: D102-540								
Mercury, Total	114		-		65-134	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193639-2 SRM Lot Number: D102-540					
Aluminum, Total	67	-	49-150	-	
Antimony, Total	148	-	1-199	-	
Arsenic, Total	90	-	83-117	-	
Barium, Total	86	-	83-118	-	
Beryllium, Total	89	-	83-116	-	
Cadmium, Total	98	-	83-118	-	
Calcium, Total	86	-	82-118	-	
Chromium, Total	85	-	83-117	-	
Cobalt, Total	88	-	84-116	-	
Copper, Total	85	-	84-116	-	
Iron, Total	83	-	61-139	-	
Lead, Total	86	-	82-118	-	
Magnesium, Total	77	-	76-124	-	
Manganese, Total	88	-	82-118	-	
Nickel, Total	89	-	83-117	-	
Potassium, Total	76	-	70-130	-	
Selenium, Total	90	-	79-121	-	
Silver, Total	86	-	80-120	-	
Sodium, Total	94	-	74-126	-	
Thallium, Total	95	-	81-119	-	
Vanadium, Total	84	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193639-2 SRM Lot Number: D102-540					
Zinc, Total	87	-	81-118	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193349-3 WG1193349-4 QC Sample: L1853088-01 Client ID: MS Sample												
Mercury, Total	13.2	0.148	11.7	0	Q	13.3	68	Q	80-120	13		20

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits		
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193639-3 WG1193639-4 QC Sample: L1853234-03 Client ID: MS Sample											
Aluminum, Total	13200	265	14700	566	Q	14000	304	Q	75-125	5	20
Antimony, Total	ND	66.2	50.8	77		49.4	75		75-125	3	20
Arsenic, Total	6.94	15.9	21.7	93		21.2	90		75-125	2	20
Barium, Total	28.4	265	268	90		251	85		75-125	7	20
Beryllium, Total	0.516J	6.62	6.45	97		6.17	94		75-125	4	20
Cadmium, Total	0.503J	6.76	6.30	93		6.09	91		75-125	3	20
Calcium, Total	2740	1320	3520	59	Q	3310	43	Q	75-125	6	20
Chromium, Total	28.8	26.5	52.5	89		50.8	84		75-125	3	20
Cobalt, Total	9.66	66.2	64.3	82		61.6	79		75-125	4	20
Copper, Total	12.5	33.1	39.3	81		35.9	71	Q	75-125	9	20
Iron, Total	26800	132	28800	1510	Q	27900	836	Q	75-125	3	20
Lead, Total	23.5	67.6	69.2	68	Q	66.5	64	Q	75-125	4	20
Magnesium, Total	6200	1320	7600	106		7270	81		75-125	4	20
Manganese, Total	349	66.2	405	84		386	56	Q	75-125	5	20
Nickel, Total	20.2	66.2	75.0	83		71.6	78		75-125	5	20
Potassium, Total	2880	1320	4550	126	Q	4150	96		75-125	9	20
Selenium, Total	1.06J	15.9	14.6	92		13.7	87		75-125	6	20
Silver, Total	ND	39.7	36.3	91		35.1	89		75-125	3	20
Sodium, Total	701	1320	1890	90		1820	85		75-125	4	20
Thallium, Total	ND	15.9	12.0	75		11.8	75		75-125	2	20
Vanadium, Total	36.3	66.2	96.8	91		92.8	86		75-125	4	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193639-3 WG1193639-4 QC Sample: L1853234-03 Client ID: MS Sample									
Zinc, Total	69.5	66.2	122	79	117	72	Q 75-125	4	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853110-01

Date Collected: 12/26/18 10:00

Client ID: RB03_17-18

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.4		%	0.100	NA	1	-	12/28/18 09:25	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/28/18 13:10	01/02/19 11:10	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.995	0.199	1	12/27/18 17:50	12/28/18 18:50	1,7196A	AJ



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853110

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1193256-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	12/27/18 17:50	12/28/18 18:50	1,7196A	AJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1193398-1										
Cyanide, Total	ND		mg/kg	0.89	0.19	1	12/28/18 13:10	01/02/19 11:01	1,9010C/9012B	LH

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1193256-2								
Chromium, Hexavalent	100		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1193398-2 WG1193398-3								
Cyanide, Total	65	Q	65	Q	80-120	11		35



Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1193256-4 QC Sample: L1853110-01 Client ID: RB03_17-18												
Chromium, Hexavalent	ND	1280	ND	0	Q	-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1193398-4 WG1193398-5 QC Sample: L1853252-01 Client ID: MS Sample												
Cyanide, Total	ND	10	11	100		7.5	69	Q	75-125	38	Q	35

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853110

Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1193256-6 QC Sample: L1853110-01 Client ID: RB03_17-18						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1193437-2 QC Sample: L1853249-02 Client ID: DUP Sample						
Solids, Total	89.7	89.6	%	0		20

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Serial_No:01041915:09
Lab Number: L1853110
Report Date: 01/04/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853110-01A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853110-01B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 05:33	NYTCL-8260HLW(14)
L1853110-01C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 05:33	NYTCL-8260HLW(14)
L1853110-01D	Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853110-01E	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1853110-01F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853110-01G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853110
Report Date: 01/04/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


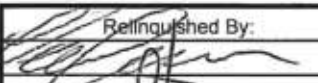
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3268	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab 12/26/18	ALPHA Job # L1853110																								
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUS (1 File) <input checked="" type="checkbox"/> EQUS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PD #																							
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: 703 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																							
These samples have been previously analyzed by Alpha <input type="checkbox"/>						ANALYSIS						Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		Total Bottles															
Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.						<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <th style="writing-mode: vertical-rl; text-orientation: mixed;">Part 375/TCL VOCs</th> <th style="writing-mode: vertical-rl; text-orientation: mixed;">Part 375/TCL SVOCs</th> <th style="writing-mode: vertical-rl; text-orientation: mixed;">Part 375/TCL PCBs</th> <th style="writing-mode: vertical-rl; text-orientation: mixed;">Pesticides</th> <th style="writing-mode: vertical-rl; text-orientation: mixed;">Herbicides</th> <th style="writing-mode: vertical-rl; text-orientation: mixed;">TAL Metals</th> <th style="writing-mode: vertical-rl; text-orientation: mixed;">Hex Chromium</th> <th style="writing-mode: vertical-rl; text-orientation: mixed;">Total cyanide</th> </tr> <tr> <td>x</td> <td>x</td> <td>x</td> <td>x</td> <td>x</td> <td>x</td> <td>x</td> <td>x</td> </tr> </table>						Part 375/TCL VOCs	Part 375/TCL SVOCs		Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total cyanide	x	x	x	x	x	x	x	x	Sample Specific Comments HOLD ANALYSES
Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total cyanide																						
x	x	x	x	x	x	x	x																						
ALPHA Lab ID (Lab Use Only) 53110 -01		Sample ID RB03-17-18		Collection Date: 12/26/18 Time: 10:00		Sample Matrix S		Sampler's Initials VZ		Container Type V A A A A A A A		Preservative F A A A A A A A		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)															
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Relinquished By:  Date/Time: 12/26/18 1522		Received By: Ramek Jackson D. Santos Date/Time: 12/26/18 1900		Date/Time: 12/26/18 2230		Date/Time: 12/26/18 2230																	
Form No: 01-25 HC (rev. 30-Sept-2013)																													



ANALYTICAL REPORT

Lab Number:	L1853111
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE + E. 146TH ST.
Project Number:	170487001
Report Date:	01/04/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1853111-01	RB03_0-2	SOIL	BRONX, NY	12/26/18 09:45	12/26/18
L1853111-02	RB03_2-3	SOIL	BRONX, NY	12/26/18 09:50	12/26/18
L1853111-03	RB03_10-12	SOIL	BRONX, NY	12/26/18 09:55	12/26/18
L1853111-04	RB12_0-2	SOIL	BRONX, NY	12/26/18 11:55	12/26/18
L1853111-05	RB12_8-9	SOIL	BRONX, NY	12/26/18 12:00	12/26/18
L1853111-06	RB12_9-10	SOIL	BRONX, NY	12/26/18 12:05	12/26/18
L1853111-07	RB12_10-12	SOIL	BRONX, NY	12/26/18 12:10	12/26/18
L1853111-08	RB02_0-2	SOIL	BRONX, NY	12/26/18 13:25	12/26/18
L1853111-09	RB02_7-9	SOIL	BRONX, NY	12/26/18 13:30	12/26/18
L1853111-10	RB02_10-12	SOIL	BRONX, NY	12/26/18 13:35	12/26/18
L1853111-11	RB02_13-15	SOIL	BRONX, NY	12/26/18 13:40	12/26/18
L1853111-12	SOTB02_122618	WATER	BRONX, NY	12/26/18 00:00	12/26/18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Volatile Organics

L1853111-01: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (158%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L1853111-02: The internal standard (IS) response(s) for 1,4-dichlorobenzene-d4 (44%) and the surrogate recovery for 4-bromofluorobenzene (133%) were outside the acceptance criteria; however, re-analysis achieved similar results: 1,4-dichlorobenzene-d4 (47%) and 4-bromofluorobenzene (141%). The results of both analyses are reported; however, since the IS response was below method criteria, all associated compounds and surrogate recoveries are considered to have a potentially high.

L1853111-04: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.

L1853111-05: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1853111-05: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (146%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Semivolatile Organics

L1853111-01, -02, -03, -04, -05, -08, -09 and -10: The sample has elevated detection limits due to the dilution required by the sample matrix.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Case Narrative (continued)

Pesticides

L1853111-02, -03, -05 and -09: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1853111-03 and -05: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

L1853111-07: The surrogate recovery is outside the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (322%); however, the sample was not re-extracted due to coelution with obvious interferences.

Herbicides

L1853111-09: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1853111-09: The surrogate recoveries are below the acceptance criteria for dcaa (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L1853111-01 through -11: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1193065-2 LCS recovery (66%), associated with L1853111-01 through -06, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1193067-2 LCS recovery (65%), associated with L1853111-07 through -11, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Case Narrative (continued)

Hexavalent Chromium

The WG1193257-5 Soluble MS recovery (61%), performed on L1853111-10, was outside the acceptance criteria. This has been attributed to matrix interference. A post-spike was performed with a recovery of 95%.

The WG1193259-4 Insoluble MS recovery (59%), performed on L1853111-11, is below the acceptance criteria. The Soluble MS recovery (0%) was also below criteria. This has been attributed to matrix interference.

A post-spike was performed with an acceptable recovery of 94%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Amita Naik

Title: Technical Director/Representative

Date: 01/04/19

ORGANICS

VOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 01:32
 Analyst: MV
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	280	130	1
1,1-Dichloroethane	ND		ug/kg	55	8.0	1
Chloroform	ND		ug/kg	83	7.7	1
Carbon tetrachloride	ND		ug/kg	55	13.	1
1,2-Dichloropropane	ND		ug/kg	55	6.9	1
Dibromochloromethane	ND		ug/kg	55	7.7	1
1,1,2-Trichloroethane	ND		ug/kg	55	15.	1
Tetrachloroethene	740		ug/kg	28	11.	1
Chlorobenzene	ND		ug/kg	28	7.0	1
Trichlorofluoromethane	ND		ug/kg	220	38.	1
1,2-Dichloroethane	ND		ug/kg	55	14.	1
1,1,1-Trichloroethane	ND		ug/kg	28	9.2	1
Bromodichloromethane	ND		ug/kg	28	6.0	1
trans-1,3-Dichloropropene	ND		ug/kg	55	15.	1
cis-1,3-Dichloropropene	ND		ug/kg	28	8.7	1
1,3-Dichloropropene, Total	ND		ug/kg	28	8.7	1
1,1-Dichloropropene	ND		ug/kg	28	8.8	1
Bromoform	ND		ug/kg	220	14.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	28	9.2	1
Benzene	18	J	ug/kg	28	9.2	1
Toluene	ND		ug/kg	55	30.	1
Ethylbenzene	44	J	ug/kg	55	7.8	1
Chloromethane	ND		ug/kg	220	51.	1
Bromomethane	ND		ug/kg	110	32.	1
Vinyl chloride	ND		ug/kg	55	18.	1
Chloroethane	ND		ug/kg	110	25.	1
1,1-Dichloroethene	ND		ug/kg	55	13.	1
trans-1,2-Dichloroethene	ND		ug/kg	83	7.6	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-01

Date Collected: 12/26/18 09:45

Client ID: RB03_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	28	7.6	1
1,2-Dichlorobenzene	ND		ug/kg	110	7.9	1
1,3-Dichlorobenzene	ND		ug/kg	110	8.2	1
1,4-Dichlorobenzene	ND		ug/kg	110	9.4	1
Methyl tert butyl ether	ND		ug/kg	110	11.	1
p/m-Xylene	120		ug/kg	110	31.	1
o-Xylene	74		ug/kg	55	16.	1
Xylenes, Total	190		ug/kg	55	16.	1
cis-1,2-Dichloroethene	ND		ug/kg	55	9.6	1
1,2-Dichloroethene, Total	ND		ug/kg	55	7.6	1
Dibromomethane	ND		ug/kg	110	13.	1
Styrene	ND		ug/kg	55	11.	1
Dichlorodifluoromethane	ND		ug/kg	550	50.	1
Acetone	ND		ug/kg	550	260	1
Carbon disulfide	ND		ug/kg	550	250	1
2-Butanone	ND		ug/kg	550	120	1
Vinyl acetate	ND		ug/kg	550	120	1
4-Methyl-2-pentanone	ND		ug/kg	550	71.	1
1,2,3-Trichloropropane	ND		ug/kg	110	7.0	1
2-Hexanone	ND		ug/kg	550	65.	1
Bromochloromethane	ND		ug/kg	110	11.	1
2,2-Dichloropropane	ND		ug/kg	110	11.	1
1,2-Dibromoethane	ND		ug/kg	55	15.	1
1,3-Dichloropropane	ND		ug/kg	110	9.2	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	28	7.3	1
Bromobenzene	ND		ug/kg	110	8.0	1
n-Butylbenzene	49	J	ug/kg	55	9.2	1
sec-Butylbenzene	78		ug/kg	55	8.0	1
tert-Butylbenzene	13	J	ug/kg	110	6.5	1
o-Chlorotoluene	ND		ug/kg	110	10.	1
p-Chlorotoluene	ND		ug/kg	110	6.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	160	55.	1
Hexachlorobutadiene	ND		ug/kg	220	9.3	1
Isopropylbenzene	39	J	ug/kg	55	6.0	1
p-Isopropyltoluene	130		ug/kg	55	6.0	1
Naphthalene	140	J	ug/kg	220	36.	1
Acrylonitrile	ND		ug/kg	220	63.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
Client ID: RB03_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	39	J	ug/kg	55	9.4	1
1,2,3-Trichlorobenzene	ND		ug/kg	110	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	110	15.	1
1,3,5-Trimethylbenzene	330		ug/kg	110	11.	1
1,2,4-Trimethylbenzene	540		ug/kg	110	18.	1
1,4-Dioxane	ND		ug/kg	5500	1900	1
p-Diethylbenzene	770		ug/kg	110	9.8	1
p-Ethyltoluene	270		ug/kg	110	21.	1
1,2,4,5-Tetramethylbenzene	150		ug/kg	110	10.	1
Ethyl ether	ND		ug/kg	110	19.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	280	78.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	158	Q	70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 20:29
 Analyst: MV
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.9	3.2	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	0.20	J	ug/kg	2.1	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.32	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.37	1
Tetrachloroethene	26		ug/kg	0.69	0.27	1
Chlorobenzene	ND		ug/kg	0.69	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.96	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.69	0.23	1
Bromodichloromethane	ND		ug/kg	0.69	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.38	1
cis-1,3-Dichloropropene	ND		ug/kg	0.69	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.69	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.69	0.22	1
Bromoform	ND		ug/kg	5.5	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.69	0.23	1
Benzene	0.63	J	ug/kg	0.69	0.23	1
Toluene	2.4		ug/kg	1.4	0.75	1
Ethylbenzene	0.93	J	ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.5	1.3	1
Bromomethane	ND		ug/kg	2.8	0.80	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.8	0.62	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.19	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-02

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.69	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.28	1
p/m-Xylene	2.0	J	ug/kg	2.8	0.77	1
o-Xylene	0.60	J	ug/kg	1.4	0.40	1
Xylenes, Total	2.6	J	ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.8	0.33	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	ND		ug/kg	14	6.6	1
Carbon disulfide	ND		ug/kg	14	6.3	1
2-Butanone	ND		ug/kg	14	3.0	1
Vinyl acetate	ND		ug/kg	14	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	0.17	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.8	0.28	1
2,2-Dichloropropane	ND		ug/kg	2.8	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
1,3-Dichloropropane	ND		ug/kg	2.8	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.69	0.18	1
Bromobenzene	ND		ug/kg	2.8	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.8	0.16	1
o-Chlorotoluene	ND		ug/kg	2.8	0.26	1
p-Chlorotoluene	ND		ug/kg	2.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.5	0.23	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.5	0.89	1
Acrylonitrile	ND		ug/kg	5.5	1.6	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
Client ID: RB03_2-3
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.40	J	ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.37	1
1,3,5-Trimethylbenzene	0.79	J	ug/kg	2.8	0.26	1
1,2,4-Trimethylbenzene	1.2	J	ug/kg	2.8	0.46	1
1,4-Dioxane	ND		ug/kg	140	48.	1
p-Diethylbenzene	ND		ug/kg	2.8	0.24	1
p-Ethyltoluene	1.7	J	ug/kg	2.8	0.53	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.8	0.26	1
Ethyl ether	ND		ug/kg	2.8	0.47	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.9	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	118		70-130
4-Bromofluorobenzene	133	Q	70-130
Dibromofluoromethane	106		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02 R
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 03:51
 Analyst: MV
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.3	3.3	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.21	1
Chloroform	0.37	J	ug/kg	2.2	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.34	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.39	1
Tetrachloroethene	31		ug/kg	0.73	0.29	1
Chlorobenzene	ND		ug/kg	0.73	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.8	1.0	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.38	1
1,1,1-Trichloroethane	ND		ug/kg	0.73	0.24	1
Bromodichloromethane	ND		ug/kg	0.73	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.40	1
cis-1,3-Dichloropropene	ND		ug/kg	0.73	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.73	0.23	1
1,1-Dichloropropene	ND		ug/kg	0.73	0.23	1
Bromoform	ND		ug/kg	5.8	0.36	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.73	0.24	1
Benzene	0.54	J	ug/kg	0.73	0.24	1
Toluene	2.0		ug/kg	1.4	0.79	1
Ethylbenzene	0.62	J	ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.8	1.4	1
Bromomethane	ND		ug/kg	2.9	0.85	1
Vinyl chloride	ND		ug/kg	1.4	0.49	1
Chloroethane	ND		ug/kg	2.9	0.66	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-02 R

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.73	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	2.9	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	2.9	0.25	1
Methyl tert butyl ether	ND		ug/kg	2.9	0.29	1
p/m-Xylene	1.3	J	ug/kg	2.9	0.82	1
o-Xylene	0.44	J	ug/kg	1.4	0.42	1
Xylenes, Total	1.7	J	ug/kg	1.4	0.42	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.26	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.20	1
Dibromomethane	ND		ug/kg	2.9	0.35	1
Styrene	ND		ug/kg	1.4	0.29	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	7.7	J	ug/kg	14	7.0	1
Carbon disulfide	ND		ug/kg	14	6.6	1
2-Butanone	ND		ug/kg	14	3.2	1
Vinyl acetate	ND		ug/kg	14	3.1	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.9	1
1,2,3-Trichloropropane	ND		ug/kg	2.9	0.18	1
2-Hexanone	ND		ug/kg	14	1.7	1
Bromochloromethane	ND		ug/kg	2.9	0.30	1
2,2-Dichloropropane	ND		ug/kg	2.9	0.29	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.41	1
1,3-Dichloropropane	ND		ug/kg	2.9	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.73	0.19	1
Bromobenzene	ND		ug/kg	2.9	0.21	1
n-Butylbenzene	ND		ug/kg	1.4	0.24	1
sec-Butylbenzene	ND		ug/kg	1.4	0.21	1
tert-Butylbenzene	ND		ug/kg	2.9	0.17	1
o-Chlorotoluene	ND		ug/kg	2.9	0.28	1
p-Chlorotoluene	ND		ug/kg	2.9	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.8	0.25	1
Isopropylbenzene	ND		ug/kg	1.4	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.16	1
Naphthalene	ND		ug/kg	5.8	0.95	1
Acrylonitrile	ND		ug/kg	5.8	1.7	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02 R
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.25	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.9	0.47	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.9	0.40	1
1,3,5-Trimethylbenzene	0.46	J	ug/kg	2.9	0.28	1
1,2,4-Trimethylbenzene	0.84	J	ug/kg	2.9	0.49	1
1,4-Dioxane	ND		ug/kg	140	51.	1
p-Diethylbenzene	ND		ug/kg	2.9	0.26	1
p-Ethyltoluene	1.0	J	ug/kg	2.9	0.56	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.9	0.28	1
Ethyl ether	ND		ug/kg	2.9	0.50	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.3	2.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	141	Q	70-130
Dibromofluoromethane	105		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 01:58
 Analyst: MV
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	320	150	1
1,1-Dichloroethane	ND		ug/kg	65	9.4	1
Chloroform	ND		ug/kg	98	9.1	1
Carbon tetrachloride	ND		ug/kg	65	15.	1
1,2-Dichloropropane	ND		ug/kg	65	8.1	1
Dibromochloromethane	ND		ug/kg	65	9.1	1
1,1,2-Trichloroethane	ND		ug/kg	65	17.	1
Tetrachloroethene	25	J	ug/kg	32	13.	1
Chlorobenzene	ND		ug/kg	32	8.3	1
Trichlorofluoromethane	ND		ug/kg	260	45.	1
1,2-Dichloroethane	ND		ug/kg	65	17.	1
1,1,1-Trichloroethane	ND		ug/kg	32	11.	1
Bromodichloromethane	ND		ug/kg	32	7.1	1
trans-1,3-Dichloropropene	ND		ug/kg	65	18.	1
cis-1,3-Dichloropropene	ND		ug/kg	32	10.	1
1,3-Dichloropropene, Total	ND		ug/kg	32	10.	1
1,1-Dichloropropene	ND		ug/kg	32	10.	1
Bromoform	ND		ug/kg	260	16.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	32	11.	1
Benzene	13	J	ug/kg	32	11.	1
Toluene	ND		ug/kg	65	35.	1
Ethylbenzene	32	J	ug/kg	65	9.2	1
Chloromethane	ND		ug/kg	260	61.	1
Bromomethane	ND		ug/kg	130	38.	1
Vinyl chloride	ND		ug/kg	65	22.	1
Chloroethane	ND		ug/kg	130	29.	1
1,1-Dichloroethene	ND		ug/kg	65	16.	1
trans-1,2-Dichloroethene	ND		ug/kg	98	8.9	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-03

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	32	8.9	1
1,2-Dichlorobenzene	ND		ug/kg	130	9.4	1
1,3-Dichlorobenzene	ND		ug/kg	130	9.6	1
1,4-Dichlorobenzene	ND		ug/kg	130	11.	1
Methyl tert butyl ether	ND		ug/kg	130	13.	1
p/m-Xylene	ND		ug/kg	130	36.	1
o-Xylene	33	J	ug/kg	65	19.	1
Xylenes, Total	33	J	ug/kg	65	19.	1
cis-1,2-Dichloroethene	ND		ug/kg	65	11.	1
1,2-Dichloroethene, Total	ND		ug/kg	65	8.9	1
Dibromomethane	ND		ug/kg	130	16.	1
Styrene	55	J	ug/kg	65	13.	1
Dichlorodifluoromethane	ND		ug/kg	650	60.	1
Acetone	ND		ug/kg	650	310	1
Carbon disulfide	ND		ug/kg	650	300	1
2-Butanone	ND		ug/kg	650	140	1
Vinyl acetate	ND		ug/kg	650	140	1
4-Methyl-2-pentanone	ND		ug/kg	650	83.	1
1,2,3-Trichloropropane	ND		ug/kg	130	8.3	1
2-Hexanone	ND		ug/kg	650	77.	1
Bromochloromethane	ND		ug/kg	130	13.	1
2,2-Dichloropropane	ND		ug/kg	130	13.	1
1,2-Dibromoethane	ND		ug/kg	65	18.	1
1,3-Dichloropropane	ND		ug/kg	130	11.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	32	8.6	1
Bromobenzene	ND		ug/kg	130	9.4	1
n-Butylbenzene	79		ug/kg	65	11.	1
sec-Butylbenzene	63	J	ug/kg	65	9.5	1
tert-Butylbenzene	ND		ug/kg	130	7.7	1
o-Chlorotoluene	ND		ug/kg	130	12.	1
p-Chlorotoluene	ND		ug/kg	130	7.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	200	65.	1
Hexachlorobutadiene	ND		ug/kg	260	11.	1
Isopropylbenzene	42	J	ug/kg	65	7.1	1
p-Isopropyltoluene	36	J	ug/kg	65	7.1	1
Naphthalene	630		ug/kg	260	42.	1
Acrylonitrile	ND		ug/kg	260	75.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	79		ug/kg	65	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	130	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	130	18.	1
1,3,5-Trimethylbenzene	75	J	ug/kg	130	12.	1
1,2,4-Trimethylbenzene	250		ug/kg	130	22.	1
1,4-Dioxane	ND		ug/kg	6500	2300	1
p-Diethylbenzene	200		ug/kg	130	12.	1
p-Ethyltoluene	97	J	ug/kg	130	25.	1
1,2,4,5-Tetramethylbenzene	270		ug/kg	130	12.	1
Ethyl ether	ND		ug/kg	130	22.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	320	92.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 02:25
 Analyst: MV
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	380	180	1
1,1-Dichloroethane	ND		ug/kg	77	11.	1
Chloroform	ND		ug/kg	120	11.	1
Carbon tetrachloride	ND		ug/kg	77	18.	1
1,2-Dichloropropane	ND		ug/kg	77	9.6	1
Dibromochloromethane	ND		ug/kg	77	11.	1
1,1,2-Trichloroethane	ND		ug/kg	77	20.	1
Tetrachloroethene	130		ug/kg	38	15.	1
Chlorobenzene	ND		ug/kg	38	9.8	1
Trichlorofluoromethane	ND		ug/kg	310	53.	1
1,2-Dichloroethane	ND		ug/kg	77	20.	1
1,1,1-Trichloroethane	ND		ug/kg	38	13.	1
Bromodichloromethane	ND		ug/kg	38	8.4	1
trans-1,3-Dichloropropene	ND		ug/kg	77	21.	1
cis-1,3-Dichloropropene	ND		ug/kg	38	12.	1
1,3-Dichloropropene, Total	ND		ug/kg	38	12.	1
1,1-Dichloropropene	ND		ug/kg	38	12.	1
Bromoform	ND		ug/kg	310	19.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	38	13.	1
Benzene	48		ug/kg	38	13.	1
Toluene	400		ug/kg	77	42.	1
Ethylbenzene	120		ug/kg	77	11.	1
Chloromethane	ND		ug/kg	310	72.	1
Bromomethane	ND		ug/kg	150	45.	1
Vinyl chloride	ND		ug/kg	77	26.	1
Chloroethane	ND		ug/kg	150	35.	1
1,1-Dichloroethene	ND		ug/kg	77	18.	1
trans-1,2-Dichloroethene	ND		ug/kg	120	10.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
Client ID: RB12_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	38	10.	1
1,2-Dichlorobenzene	ND		ug/kg	150	11.	1
1,3-Dichlorobenzene	ND		ug/kg	150	11.	1
1,4-Dichlorobenzene	ND		ug/kg	150	13.	1
Methyl tert butyl ether	ND		ug/kg	150	15.	1
p/m-Xylene	620		ug/kg	150	43.	1
o-Xylene	200		ug/kg	77	22.	1
Xylenes, Total	820		ug/kg	77	22.	1
cis-1,2-Dichloroethene	ND		ug/kg	77	13.	1
1,2-Dichloroethene, Total	ND		ug/kg	77	10.	1
Dibromomethane	ND		ug/kg	150	18.	1
Styrene	ND		ug/kg	77	15.	1
Dichlorodifluoromethane	ND		ug/kg	770	70.	1
Acetone	ND		ug/kg	770	370	1
Carbon disulfide	ND		ug/kg	770	350	1
2-Butanone	ND		ug/kg	770	170	1
Vinyl acetate	ND		ug/kg	770	160	1
4-Methyl-2-pentanone	ND		ug/kg	770	98.	1
1,2,3-Trichloropropane	ND		ug/kg	150	9.8	1
2-Hexanone	ND		ug/kg	770	91.	1
Bromochloromethane	ND		ug/kg	150	16.	1
2,2-Dichloropropane	ND		ug/kg	150	16.	1
1,2-Dibromoethane	ND		ug/kg	77	21.	1
1,3-Dichloropropane	ND		ug/kg	150	13.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	38	10.	1
Bromobenzene	ND		ug/kg	150	11.	1
n-Butylbenzene	19	J	ug/kg	77	13.	1
sec-Butylbenzene	29	J	ug/kg	77	11.	1
tert-Butylbenzene	ND		ug/kg	150	9.1	1
o-Chlorotoluene	ND		ug/kg	150	15.	1
p-Chlorotoluene	ND		ug/kg	150	8.3	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	230	77.	1
Hexachlorobutadiene	ND		ug/kg	310	13.	1
Isopropylbenzene	18	J	ug/kg	77	8.4	1
p-Isopropyltoluene	34	J	ug/kg	77	8.4	1
Naphthalene	220	J	ug/kg	310	50.	1
Acrylonitrile	ND		ug/kg	310	88.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
Client ID: RB12_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	80		ug/kg	77	13.	1
1,2,3-Trichlorobenzene	ND		ug/kg	150	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	150	21.	1
1,3,5-Trimethylbenzene	120	J	ug/kg	150	15.	1
1,2,4-Trimethylbenzene	200		ug/kg	150	26.	1
1,4-Dioxane	ND		ug/kg	7700	2700	1
p-Diethylbenzene	150		ug/kg	150	14.	1
p-Ethyltoluene	340		ug/kg	150	29.	1
1,2,4,5-Tetramethylbenzene	32	J	ug/kg	150	15.	1
Ethyl ether	ND		ug/kg	150	26.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	380	110	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 11:50
 Analyst: JC
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	630	290	2
1,1-Dichloroethane	ND		ug/kg	130	18.	2
Chloroform	ND		ug/kg	190	18.	2
Carbon tetrachloride	ND		ug/kg	130	29.	2
1,2-Dichloropropane	ND		ug/kg	130	16.	2
Dibromochloromethane	ND		ug/kg	130	18.	2
1,1,2-Trichloroethane	ND		ug/kg	130	34.	2
Tetrachloroethene	ND		ug/kg	63	25.	2
Chlorobenzene	ND		ug/kg	63	16.	2
Trichlorofluoromethane	ND		ug/kg	500	88.	2
1,2-Dichloroethane	ND		ug/kg	130	32.	2
1,1,1-Trichloroethane	ND		ug/kg	63	21.	2
Bromodichloromethane	ND		ug/kg	63	14.	2
trans-1,3-Dichloropropene	ND		ug/kg	130	34.	2
cis-1,3-Dichloropropene	ND		ug/kg	63	20.	2
1,3-Dichloropropene, Total	ND		ug/kg	63	20.	2
1,1-Dichloropropene	ND		ug/kg	63	20.	2
Bromoform	ND		ug/kg	500	31.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	63	21.	2
Benzene	ND		ug/kg	63	21.	2
Toluene	ND		ug/kg	130	68.	2
Ethylbenzene	32	J	ug/kg	130	18.	2
Chloromethane	ND		ug/kg	500	120	2
Bromomethane	ND		ug/kg	250	73.	2
Vinyl chloride	ND		ug/kg	130	42.	2
Chloroethane	ND		ug/kg	250	57.	2
1,1-Dichloroethene	ND		ug/kg	130	30.	2
trans-1,2-Dichloroethene	ND		ug/kg	190	17.	2

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-05 D

Date Collected: 12/26/18 12:00

Client ID: RB12_8-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	63	17.	2
1,2-Dichlorobenzene	ND		ug/kg	250	18.	2
1,3-Dichlorobenzene	ND		ug/kg	250	19.	2
1,4-Dichlorobenzene	ND		ug/kg	250	22.	2
Methyl tert butyl ether	ND		ug/kg	250	25.	2
p/m-Xylene	ND		ug/kg	250	71.	2
o-Xylene	ND		ug/kg	130	37.	2
Xylenes, Total	ND		ug/kg	130	37.	2
cis-1,2-Dichloroethene	ND		ug/kg	130	22.	2
1,2-Dichloroethene, Total	ND		ug/kg	130	17.	2
Dibromomethane	ND		ug/kg	250	30.	2
Styrene	ND		ug/kg	130	25.	2
Dichlorodifluoromethane	ND		ug/kg	1300	120	2
Acetone	ND		ug/kg	1300	610	2
Carbon disulfide	ND		ug/kg	1300	570	2
2-Butanone	ND		ug/kg	1300	280	2
Vinyl acetate	ND		ug/kg	1300	270	2
4-Methyl-2-pentanone	ND		ug/kg	1300	160	2
1,2,3-Trichloropropane	ND		ug/kg	250	16.	2
2-Hexanone	ND		ug/kg	1300	150	2
Bromochloromethane	ND		ug/kg	250	26.	2
2,2-Dichloropropane	ND		ug/kg	250	25.	2
1,2-Dibromoethane	ND		ug/kg	130	35.	2
1,3-Dichloropropane	ND		ug/kg	250	21.	2
1,1,1,2-Tetrachloroethane	ND		ug/kg	63	17.	2
Bromobenzene	ND		ug/kg	250	18.	2
n-Butylbenzene	2000		ug/kg	130	21.	2
sec-Butylbenzene	1600		ug/kg	130	18.	2
tert-Butylbenzene	90	J	ug/kg	250	15.	2
o-Chlorotoluene	ND		ug/kg	250	24.	2
p-Chlorotoluene	ND		ug/kg	250	14.	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	380	120	2
Hexachlorobutadiene	ND		ug/kg	500	21.	2
Isopropylbenzene	100	J	ug/kg	130	14.	2
p-Isopropyltoluene	1900		ug/kg	130	14.	2
Naphthalene	1500		ug/kg	500	82.	2
Acrylonitrile	ND		ug/kg	500	140	2

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	440		ug/kg	130	22.	2
1,2,3-Trichlorobenzene	ND		ug/kg	250	41.	2
1,2,4-Trichlorobenzene	ND		ug/kg	250	34.	2
1,3,5-Trimethylbenzene	2200		ug/kg	250	24.	2
1,2,4-Trimethylbenzene	11000		ug/kg	250	42.	2
1,4-Dioxane	ND		ug/kg	13000	4400	2
p-Diethylbenzene	9000		ug/kg	250	22.	2
p-Ethyltoluene	2400		ug/kg	250	48.	2
1,2,4,5-Tetramethylbenzene	2100		ug/kg	250	24.	2
Ethyl ether	ND		ug/kg	250	43.	2
trans-1,4-Dichloro-2-butene	ND		ug/kg	630	180	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	146	Q	70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 03:17
 Analyst: MV
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	320	150	1
1,1-Dichloroethane	ND		ug/kg	64	9.3	1
Chloroform	ND		ug/kg	96	9.0	1
Carbon tetrachloride	ND		ug/kg	64	15.	1
1,2-Dichloropropane	ND		ug/kg	64	8.0	1
Dibromochloromethane	ND		ug/kg	64	9.0	1
1,1,2-Trichloroethane	ND		ug/kg	64	17.	1
Tetrachloroethene	ND		ug/kg	32	12.	1
Chlorobenzene	ND		ug/kg	32	8.2	1
Trichlorofluoromethane	ND		ug/kg	260	45.	1
1,2-Dichloroethane	ND		ug/kg	64	16.	1
1,1,1-Trichloroethane	ND		ug/kg	32	11.	1
Bromodichloromethane	ND		ug/kg	32	7.0	1
trans-1,3-Dichloropropene	ND		ug/kg	64	18.	1
cis-1,3-Dichloropropene	ND		ug/kg	32	10.	1
1,3-Dichloropropene, Total	ND		ug/kg	32	10.	1
1,1-Dichloropropene	ND		ug/kg	32	10.	1
Bromoform	ND		ug/kg	260	16.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	32	11.	1
Benzene	28	J	ug/kg	32	11.	1
Toluene	160		ug/kg	64	35.	1
Ethylbenzene	79		ug/kg	64	9.0	1
Chloromethane	ND		ug/kg	260	60.	1
Bromomethane	ND		ug/kg	130	37.	1
Vinyl chloride	ND		ug/kg	64	22.	1
Chloroethane	ND		ug/kg	130	29.	1
1,1-Dichloroethene	ND		ug/kg	64	15.	1
trans-1,2-Dichloroethene	ND		ug/kg	96	8.8	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-06

Date Collected: 12/26/18 12:05

Client ID: RB12_9-10

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	32	8.8	1
1,2-Dichlorobenzene	ND		ug/kg	130	9.2	1
1,3-Dichlorobenzene	ND		ug/kg	130	9.5	1
1,4-Dichlorobenzene	ND		ug/kg	130	11.	1
Methyl tert butyl ether	ND		ug/kg	130	13.	1
p/m-Xylene	160		ug/kg	130	36.	1
o-Xylene	53	J	ug/kg	64	19.	1
Xylenes, Total	210	J	ug/kg	64	19.	1
cis-1,2-Dichloroethene	ND		ug/kg	64	11.	1
1,2-Dichloroethene, Total	ND		ug/kg	64	8.8	1
Dibromomethane	ND		ug/kg	130	15.	1
Styrene	ND		ug/kg	64	12.	1
Dichlorodifluoromethane	ND		ug/kg	640	59.	1
Acetone	ND		ug/kg	640	310	1
Carbon disulfide	ND		ug/kg	640	290	1
2-Butanone	ND		ug/kg	640	140	1
Vinyl acetate	ND		ug/kg	640	140	1
4-Methyl-2-pentanone	ND		ug/kg	640	82.	1
1,2,3-Trichloropropane	ND		ug/kg	130	8.2	1
2-Hexanone	ND		ug/kg	640	76.	1
Bromochloromethane	ND		ug/kg	130	13.	1
2,2-Dichloropropane	ND		ug/kg	130	13.	1
1,2-Dibromoethane	ND		ug/kg	64	18.	1
1,3-Dichloropropane	ND		ug/kg	130	11.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	32	8.5	1
Bromobenzene	ND		ug/kg	130	9.3	1
n-Butylbenzene	70		ug/kg	64	11.	1
sec-Butylbenzene	93		ug/kg	64	9.4	1
tert-Butylbenzene	ND		ug/kg	130	7.6	1
o-Chlorotoluene	ND		ug/kg	130	12.	1
p-Chlorotoluene	ND		ug/kg	130	6.9	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	190	64.	1
Hexachlorobutadiene	ND		ug/kg	260	11.	1
Isopropylbenzene	30	J	ug/kg	64	7.0	1
p-Isopropyltoluene	42	J	ug/kg	64	7.0	1
Naphthalene	1000		ug/kg	260	42.	1
Acrylonitrile	ND		ug/kg	260	74.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
Client ID: RB12_9-10
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	74		ug/kg	64	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	130	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	130	17.	1
1,3,5-Trimethylbenzene	180		ug/kg	130	12.	1
1,2,4-Trimethylbenzene	540		ug/kg	130	21.	1
1,4-Dioxane	ND		ug/kg	6400	2200	1
p-Diethylbenzene	210		ug/kg	130	11.	1
p-Ethyltoluene	270		ug/kg	130	25.	1
1,2,4,5-Tetramethylbenzene	38	J	ug/kg	130	12.	1
Ethyl ether	ND		ug/kg	130	22.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	320	91.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 20:57
 Analyst: AD
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	0.20	J	ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	0.22	J	ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	0.48		ug/kg	0.48	0.16	1
Toluene	1.0		ug/kg	0.95	0.52	1
Ethylbenzene	0.47	J	ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-07

Date Collected: 12/26/18 12:10

Client ID: RB12_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.95	0.28	1
Xylenes, Total	ND		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	ND		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
Vinyl acetate	ND		ug/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.95	0.16	1
sec-Butylbenzene	0.18	J	ug/kg	0.95	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.10	1
Naphthalene	1.5	J	ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	0.43	J	ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	1.2	J	ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	95	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	0.47	J	ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 21:24
 Analyst: AD
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.9	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.59	0.23	1
Chlorobenzene	ND		ug/kg	0.59	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.82	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.59	0.20	1
Bromodichloromethane	ND		ug/kg	0.59	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.59	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.59	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.59	0.19	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.59	0.20	1
Benzene	ND		ug/kg	0.59	0.20	1
Toluene	ND		ug/kg	1.2	0.64	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.4	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.4	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-08

Date Collected: 12/26/18 13:25

Client ID: RB02_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.59	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.66	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.59	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.22	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.7	0.76	1
Acrylonitrile	ND		ug/kg	4.7	1.4	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
Client ID: RB02_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.39	1
1,4-Dioxane	ND		ug/kg	120	41.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.45	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.22	1
Ethyl ether	ND		ug/kg	2.4	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 21:52
 Analyst: AD
 Percent Solids: 70%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.8	4.0	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.26	1
Chloroform	0.46	J	ug/kg	2.6	0.25	1
Carbon tetrachloride	ND		ug/kg	1.8	0.40	1
1,2-Dichloropropane	ND		ug/kg	1.8	0.22	1
Dibromochloromethane	ND		ug/kg	1.8	0.25	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.47	1
Tetrachloroethene	1.7		ug/kg	0.88	0.34	1
Chlorobenzene	ND		ug/kg	0.88	0.22	1
Trichlorofluoromethane	ND		ug/kg	7.0	1.2	1
1,2-Dichloroethane	ND		ug/kg	1.8	0.45	1
1,1,1-Trichloroethane	ND		ug/kg	0.88	0.29	1
Bromodichloromethane	ND		ug/kg	0.88	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.8	0.48	1
cis-1,3-Dichloropropene	ND		ug/kg	0.88	0.28	1
1,3-Dichloropropene, Total	ND		ug/kg	0.88	0.28	1
1,1-Dichloropropene	ND		ug/kg	0.88	0.28	1
Bromoform	ND		ug/kg	7.0	0.43	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.88	0.29	1
Benzene	0.36	J	ug/kg	0.88	0.29	1
Toluene	ND		ug/kg	1.8	0.96	1
Ethylbenzene	0.28	J	ug/kg	1.8	0.25	1
Chloromethane	ND		ug/kg	7.0	1.6	1
Bromomethane	ND		ug/kg	3.5	1.0	1
Vinyl chloride	ND		ug/kg	1.8	0.59	1
Chloroethane	ND		ug/kg	3.5	0.80	1
1,1-Dichloroethene	ND		ug/kg	1.8	0.42	1
trans-1,2-Dichloroethene	ND		ug/kg	2.6	0.24	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-09

Date Collected: 12/26/18 13:30

Client ID: RB02_7-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.88	0.24	1
1,2-Dichlorobenzene	ND		ug/kg	3.5	0.25	1
1,3-Dichlorobenzene	ND		ug/kg	3.5	0.26	1
1,4-Dichlorobenzene	ND		ug/kg	3.5	0.30	1
Methyl tert butyl ether	ND		ug/kg	3.5	0.35	1
p/m-Xylene	1.2	J	ug/kg	3.5	0.99	1
o-Xylene	0.53	J	ug/kg	1.8	0.51	1
Xylenes, Total	1.7	J	ug/kg	1.8	0.51	1
cis-1,2-Dichloroethene	ND		ug/kg	1.8	0.31	1
1,2-Dichloroethene, Total	ND		ug/kg	1.8	0.24	1
Dibromomethane	ND		ug/kg	3.5	0.42	1
Styrene	ND		ug/kg	1.8	0.34	1
Dichlorodifluoromethane	ND		ug/kg	18	1.6	1
Acetone	11	J	ug/kg	18	8.5	1
Carbon disulfide	ND		ug/kg	18	8.0	1
2-Butanone	ND		ug/kg	18	3.9	1
Vinyl acetate	ND		ug/kg	18	3.8	1
4-Methyl-2-pentanone	ND		ug/kg	18	2.2	1
1,2,3-Trichloropropane	ND		ug/kg	3.5	0.22	1
2-Hexanone	ND		ug/kg	18	2.1	1
Bromochloromethane	ND		ug/kg	3.5	0.36	1
2,2-Dichloropropane	ND		ug/kg	3.5	0.36	1
1,2-Dibromoethane	ND		ug/kg	1.8	0.49	1
1,3-Dichloropropane	ND		ug/kg	3.5	0.29	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.88	0.23	1
Bromobenzene	ND		ug/kg	3.5	0.26	1
n-Butylbenzene	ND		ug/kg	1.8	0.29	1
sec-Butylbenzene	ND		ug/kg	1.8	0.26	1
tert-Butylbenzene	ND		ug/kg	3.5	0.21	1
o-Chlorotoluene	ND		ug/kg	3.5	0.34	1
p-Chlorotoluene	ND		ug/kg	3.5	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	1.8	1
Hexachlorobutadiene	ND		ug/kg	7.0	0.30	1
Isopropylbenzene	ND		ug/kg	1.8	0.19	1
p-Isopropyltoluene	ND		ug/kg	1.8	0.19	1
Naphthalene	10		ug/kg	7.0	1.1	1
Acrylonitrile	ND		ug/kg	7.0	2.0	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09
Client ID: RB02_7-9
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.8	0.30	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.5	0.57	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.5	0.48	1
1,3,5-Trimethylbenzene	0.41	J	ug/kg	3.5	0.34	1
1,2,4-Trimethylbenzene	0.62	J	ug/kg	3.5	0.59	1
1,4-Dioxane	ND		ug/kg	180	62.	1
p-Diethylbenzene	ND		ug/kg	3.5	0.31	1
p-Ethyltoluene	ND		ug/kg	3.5	0.68	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.5	0.34	1
Ethyl ether	ND		ug/kg	3.5	0.60	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.8	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 22:19
 Analyst: MV
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.6	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.92	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.92	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.92	0.12	1
Dibromochloromethane	ND		ug/kg	0.92	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.92	0.24	1
Tetrachloroethene	ND		ug/kg	0.46	0.18	1
Chlorobenzene	ND		ug/kg	0.46	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.64	1
1,2-Dichloroethane	ND		ug/kg	0.92	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.15	1
Bromodichloromethane	ND		ug/kg	0.46	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.92	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.46	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.46	0.15	1
Bromoform	ND		ug/kg	3.7	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1
Benzene	0.17	J	ug/kg	0.46	0.15	1
Toluene	ND		ug/kg	0.92	0.50	1
Ethylbenzene	ND		ug/kg	0.92	0.13	1
Chloromethane	ND		ug/kg	3.7	0.86	1
Bromomethane	ND		ug/kg	1.8	0.54	1
Vinyl chloride	ND		ug/kg	0.92	0.31	1
Chloroethane	ND		ug/kg	1.8	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.92	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-10

Date Collected: 12/26/18 13:35

Client ID: RB02_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.46	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.52	1
o-Xylene	ND		ug/kg	0.92	0.27	1
Xylenes, Total	ND		ug/kg	0.92	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.92	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.92	0.13	1
Dibromomethane	ND		ug/kg	1.8	0.22	1
Styrene	ND		ug/kg	0.92	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.2	0.84	1
Acetone	12		ug/kg	9.2	4.4	1
Carbon disulfide	ND		ug/kg	9.2	4.2	1
2-Butanone	ND		ug/kg	9.2	2.0	1
Vinyl acetate	ND		ug/kg	9.2	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.2	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.12	1
2-Hexanone	ND		ug/kg	9.2	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.92	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.46	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.92	0.15	1
sec-Butylbenzene	ND		ug/kg	0.92	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
o-Chlorotoluene	ND		ug/kg	1.8	0.18	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.92	1
Hexachlorobutadiene	ND		ug/kg	3.7	0.16	1
Isopropylbenzene	ND		ug/kg	0.92	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.92	0.10	1
Naphthalene	ND		ug/kg	3.7	0.60	1
Acrylonitrile	ND		ug/kg	3.7	1.0	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
Client ID: RB02_10-12
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.92	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.31	1
1,4-Dioxane	ND		ug/kg	92	32.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.35	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.18	1
Ethyl ether	ND		ug/kg	1.8	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.6	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 22:47
 Analyst: MV
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	0.38	J	ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.58	1
Ethylbenzene	0.51	J	ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.2	0.62	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
Client ID: RB02_13-15
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.98	1
Acetone	43		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	7.6	J	ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	0.22	J	ug/kg	1.1	0.18	1
sec-Butylbenzene	0.83	J	ug/kg	1.1	0.16	1
tert-Butylbenzene	0.22	J	ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.20	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	0.62	J	ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	4.5		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
Client ID: RB02_13-15
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.28	J	ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	0.87	J	ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.20	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-12
 Client ID: SOTB02_122618
 Sample Location: BRONX, NY

Date Collected: 12/26/18 00:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 16:16
 Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-12
 Client ID: SOTB02_122618
 Sample Location: BRONX, NY

Date Collected: 12/26/18 00:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-12
Client ID: SOTB02_122618
Sample Location: BRONX, NY

Date Collected: 12/26/18 00:00
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 09:56
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1194042-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 09:56
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1194042-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 09:56
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1194042-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 19:06
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02,07-11 Batch: WG1194592-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 19:06
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02,07-11 Batch: WG1194592-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 19:06
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02,07-11 Batch: WG1194592-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 18:48
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1194605-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/19 18:48
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1194605-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/03/19 18:48
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1194605-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/19 07:56
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1194817-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/19 07:56
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1194817-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/04/19 07:56
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1194817-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1194042-3 WG1194042-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	100		110		63-132	10		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	100		110		63-130	10		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		110		75-130	10		20
Trichlorofluoromethane	100		110		62-150	10		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	100		110		70-130	10		20
cis-1,3-Dichloropropene	100		110		70-130	10		20
1,1-Dichloropropene	100		110		70-130	10		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	100		110		70-130	10		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	90		92		64-130	2		20
Bromomethane	48		50		39-139	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1194042-3 WG1194042-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	100		110		55-138	10		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Trichloroethene	100		110		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	99		100		70-130	1		20
Methyl tert butyl ether	100		110		63-130	10		20
p/m-Xylene	100		110		70-130	10		20
o-Xylene	100		110		70-130	10		20
cis-1,2-Dichloroethene	100		110		70-130	10		20
Dibromomethane	100		110		70-130	10		20
1,2,3-Trichloropropane	110		120		64-130	9		20
Acrylonitrile	97		110		70-130	13		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	130		130		58-148	0		20
Carbon disulfide	100		110		51-130	10		20
2-Butanone	83		84		63-138	1		20
Vinyl acetate	110		120		70-130	9		20
4-Methyl-2-pentanone	96		100		59-130	4		20
2-Hexanone	98		110		57-130	12		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1194042-3 WG1194042-4								
Bromochloromethane	110		120		70-130	9		20
2,2-Dichloropropane	100		110		63-133	10		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		110		64-130	10		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	100		110		70-130	10		20
tert-Butylbenzene	100		110		70-130	10		20
o-Chlorotoluene	93		97		70-130	4		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	94		100		41-144	6		20
Hexachlorobutadiene	110		110		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	96		100		70-130	4		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	98		100		70-130	2		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	128		126		56-162	2		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1194042-3 WG1194042-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	110		110		59-134	0		20
trans-1,4-Dichloro-2-butene	94		97		70-130	3		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	108		109		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	104		101		70-130
Dibromofluoromethane	103		104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,07-11 Batch: WG1194592-3 WG1194592-4								
Methylene chloride	84		81		70-130	4		30
1,1-Dichloroethane	93		90		70-130	3		30
Chloroform	90		88		70-130	2		30
Carbon tetrachloride	92		91		70-130	1		30
1,2-Dichloropropane	92		90		70-130	2		30
Dibromochloromethane	92		96		70-130	4		30
1,1,2-Trichloroethane	97		99		70-130	2		30
Tetrachloroethene	101		103		70-130	2		30
Chlorobenzene	96		92		70-130	4		30
Trichlorofluoromethane	90		85		70-139	6		30
1,2-Dichloroethane	92		90		70-130	2		30
1,1,1-Trichloroethane	96		94		70-130	2		30
Bromodichloromethane	92		91		70-130	1		30
trans-1,3-Dichloropropene	93		96		70-130	3		30
cis-1,3-Dichloropropene	87		86		70-130	1		30
1,1-Dichloropropene	105		102		70-130	3		30
Bromoform	97		91		70-130	6		30
1,1,2,2-Tetrachloroethane	95		91		70-130	4		30
Benzene	93		90		70-130	3		30
Toluene	102		102		70-130	0		30
Ethylbenzene	105		100		70-130	5		30
Chloromethane	87		81		52-130	7		30
Bromomethane	72		69		57-147	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,07-11 Batch: WG1194592-3 WG1194592-4								
Vinyl chloride	87		82		67-130	6		30
Chloroethane	83		78		50-151	6		30
1,1-Dichloroethene	77		82		65-135	6		30
trans-1,2-Dichloroethene	87		86		70-130	1		30
Trichloroethene	94		92		70-130	2		30
1,2-Dichlorobenzene	95		86		70-130	10		30
1,3-Dichlorobenzene	99		98		70-130	1		30
1,4-Dichlorobenzene	95		93		70-130	2		30
Methyl tert butyl ether	87		87		66-130	0		30
p/m-Xylene	106		99		70-130	7		30
o-Xylene	99		99		70-130	0		30
cis-1,2-Dichloroethene	88		87		70-130	1		30
Dibromomethane	89		89		70-130	0		30
Styrene	90		88		70-130	2		30
Dichlorodifluoromethane	60		57		30-146	5		30
Acetone	100		101		54-140	1		30
Carbon disulfide	78		82		59-130	5		30
2-Butanone	87		93		70-130	7		30
Vinyl acetate	103		102		70-130	1		30
4-Methyl-2-pentanone	87		94		70-130	8		30
1,2,3-Trichloropropane	96		94		68-130	2		30
2-Hexanone	90		99		70-130	10		30
Bromochloromethane	86		86		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,07-11 Batch: WG1194592-3 WG1194592-4								
2,2-Dichloropropane	98		96		70-130	2		30
1,2-Dibromoethane	95		100		70-130	5		30
1,3-Dichloropropane	98		102		69-130	4		30
1,1,1,2-Tetrachloroethane	97		94		70-130	3		30
Bromobenzene	99		92		70-130	7		30
n-Butylbenzene	108		102		70-130	6		30
sec-Butylbenzene	103		101		70-130	2		30
tert-Butylbenzene	113		108		70-130	5		30
o-Chlorotoluene	104		97		70-130	7		30
p-Chlorotoluene	111		101		70-130	9		30
1,2-Dibromo-3-chloropropane	84		87		68-130	4		30
Hexachlorobutadiene	99		95		67-130	4		30
Isopropylbenzene	115		106		70-130	8		30
p-Isopropyltoluene	109		106		70-130	3		30
Naphthalene	90		87		70-130	3		30
Acrylonitrile	80		83		70-130	4		30
n-Propylbenzene	112		100		70-130	11		30
1,2,3-Trichlorobenzene	93		89		70-130	4		30
1,2,4-Trichlorobenzene	98		94		70-130	4		30
1,3,5-Trimethylbenzene	110		103		70-130	7		30
1,2,4-Trimethylbenzene	114		111		70-130	3		30
1,4-Dioxane	104		110		65-136	6		30
p-Diethylbenzene	105		100		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,07-11 Batch: WG1194592-3 WG1194592-4								
p-Ethyltoluene	108		98		70-130	10		30
1,2,4,5-Tetramethylbenzene	92		86		70-130	7		30
Ethyl ether	76		73		67-130	4		30
trans-1,4-Dichloro-2-butene	98		88		70-130	11		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	107		105		70-130
Toluene-d8	108		113		70-130
4-Bromofluorobenzene	111		104		70-130
Dibromofluoromethane	97		97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1194605-3 WG1194605-4								
Methylene chloride	85		84		70-130	1		30
1,1-Dichloroethane	87		86		70-130	1		30
Chloroform	92		93		70-130	1		30
Carbon tetrachloride	97		96		70-130	1		30
1,2-Dichloropropane	88		88		70-130	0		30
Dibromochloromethane	96		96		70-130	0		30
1,1,2-Trichloroethane	93		95		70-130	2		30
Tetrachloroethene	92		93		70-130	1		30
Chlorobenzene	90		91		70-130	1		30
Trichlorofluoromethane	63	Q	64	Q	70-139	2		30
1,2-Dichloroethane	88		89		70-130	1		30
1,1,1-Trichloroethane	99		100		70-130	1		30
Bromodichloromethane	101		104		70-130	3		30
trans-1,3-Dichloropropene	101		102		70-130	1		30
cis-1,3-Dichloropropene	105		106		70-130	1		30
1,1-Dichloropropene	101		101		70-130	0		30
Bromoform	96		94		70-130	2		30
1,1,1,2-Tetrachloroethane	99		98		70-130	1		30
Benzene	95		94		70-130	1		30
Toluene	91		90		70-130	1		30
Ethylbenzene	94		94		70-130	0		30
Chloromethane	70		69		52-130	1		30
Bromomethane	42	Q	46	Q	57-147	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1194605-3 WG1194605-4								
Vinyl chloride	63	Q	63	Q	67-130	0		30
Chloroethane	48	Q	48	Q	50-151	0		30
1,1-Dichloroethene	95		98		65-135	3		30
trans-1,2-Dichloroethene	94		95		70-130	1		30
Trichloroethene	97		96		70-130	1		30
1,2-Dichlorobenzene	89		88		70-130	1		30
1,3-Dichlorobenzene	90		89		70-130	1		30
1,4-Dichlorobenzene	88		88		70-130	0		30
Methyl tert butyl ether	104		104		66-130	0		30
p/m-Xylene	92		92		70-130	0		30
o-Xylene	94		94		70-130	0		30
cis-1,2-Dichloroethene	95		95		70-130	0		30
Dibromomethane	100		100		70-130	0		30
Styrene	87		86		70-130	1		30
Dichlorodifluoromethane	90		90		30-146	0		30
Acetone	117		111		54-140	5		30
Carbon disulfide	88		88		59-130	0		30
2-Butanone	93		89		70-130	4		30
Vinyl acetate	53	Q	64	Q	70-130	19		30
4-Methyl-2-pentanone	99		97		70-130	2		30
1,2,3-Trichloropropane	96		94		68-130	2		30
2-Hexanone	102		97		70-130	5		30
Bromochloromethane	98		98		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1194605-3 WG1194605-4								
2,2-Dichloropropane	102		101		70-130	1		30
1,2-Dibromoethane	99		99		70-130	0		30
1,3-Dichloropropane	96		96		69-130	0		30
1,1,1,2-Tetrachloroethane	95		95		70-130	0		30
Bromobenzene	92		91		70-130	1		30
n-Butylbenzene	93		92		70-130	1		30
sec-Butylbenzene	95		94		70-130	1		30
tert-Butylbenzene	95		94		70-130	1		30
o-Chlorotoluene	96		93		70-130	3		30
p-Chlorotoluene	98		97		70-130	1		30
1,2-Dibromo-3-chloropropane	105		102		68-130	3		30
Hexachlorobutadiene	91		91		67-130	0		30
Isopropylbenzene	97		96		70-130	1		30
p-Isopropyltoluene	95		94		70-130	1		30
Naphthalene	97		96		70-130	1		30
Acrylonitrile	86		86		70-130	0		30
n-Propylbenzene	95		94		70-130	1		30
1,2,3-Trichlorobenzene	91		92		70-130	1		30
1,2,4-Trichlorobenzene	91		91		70-130	0		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	95		95		70-130	0		30
1,4-Dioxane	99		101		65-136	2		30
p-Diethylbenzene	95		93		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1194605-3 WG1194605-4								
p-Ethyltoluene	98		98		70-130	0		30
1,2,4,5-Tetramethylbenzene	96		95		70-130	1		30
Ethyl ether	71		71		67-130	0		30
trans-1,4-Dichloro-2-butene	100		96		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		100		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	117		116		70-130
Dibromofluoromethane	102		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1194817-3 WG1194817-4								
Methylene chloride	86		84		70-130	2		30
1,1-Dichloroethane	87		86		70-130	1		30
Chloroform	95		95		70-130	0		30
Carbon tetrachloride	100		100		70-130	0		30
1,2-Dichloropropane	87		88		70-130	1		30
Dibromochloromethane	93		94		70-130	1		30
1,1,2-Trichloroethane	91		92		70-130	1		30
Tetrachloroethene	97		94		70-130	3		30
Chlorobenzene	93		92		70-130	1		30
Trichlorofluoromethane	74		75		70-139	1		30
1,2-Dichloroethane	87		89		70-130	2		30
1,1,1-Trichloroethane	102		101		70-130	1		30
Bromodichloromethane	101		102		70-130	1		30
trans-1,3-Dichloropropene	98		97		70-130	1		30
cis-1,3-Dichloropropene	104		105		70-130	1		30
1,1-Dichloropropene	102		100		70-130	2		30
Bromoform	91		92		70-130	1		30
1,1,2,2-Tetrachloroethane	94		95		70-130	1		30
Benzene	96		95		70-130	1		30
Toluene	93		91		70-130	2		30
Ethylbenzene	95		94		70-130	1		30
Chloromethane	71		68		52-130	4		30
Bromomethane	57		56	Q	57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1194817-3 WG1194817-4								
Vinyl chloride	70		70		67-130	0		30
Chloroethane	56		55		50-151	2		30
1,1-Dichloroethene	99		97		65-135	2		30
trans-1,2-Dichloroethene	98		96		70-130	2		30
Trichloroethene	98		98		70-130	0		30
1,2-Dichlorobenzene	90		89		70-130	1		30
1,3-Dichlorobenzene	91		90		70-130	1		30
1,4-Dichlorobenzene	90		89		70-130	1		30
Methyl tert butyl ether	101		103		66-130	2		30
p/m-Xylene	94		93		70-130	1		30
o-Xylene	97		95		70-130	2		30
cis-1,2-Dichloroethene	98		98		70-130	0		30
Dibromomethane	98		100		70-130	2		30
Styrene	87		87		70-130	0		30
Dichlorodifluoromethane	91		88		30-146	3		30
Acetone	109		101		54-140	8		30
Carbon disulfide	91		89		59-130	2		30
2-Butanone	80		93		70-130	15		30
Vinyl acetate	88		92		70-130	4		30
4-Methyl-2-pentanone	86		88		70-130	2		30
1,2,3-Trichloropropane	88		91		68-130	3		30
2-Hexanone	94		94		70-130	0		30
Bromochloromethane	98		99		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1194817-3 WG1194817-4								
2,2-Dichloropropane	103		102		70-130	1		30
1,2-Dibromoethane	96		97		70-130	1		30
1,3-Dichloropropane	94		94		69-130	0		30
1,1,1,2-Tetrachloroethane	96		96		70-130	0		30
Bromobenzene	93		92		70-130	1		30
n-Butylbenzene	94		92		70-130	2		30
sec-Butylbenzene	96		93		70-130	3		30
tert-Butylbenzene	96		94		70-130	2		30
o-Chlorotoluene	94		94		70-130	0		30
p-Chlorotoluene	96		96		70-130	0		30
1,2-Dibromo-3-chloropropane	95		98		68-130	3		30
Hexachlorobutadiene	92		89		67-130	3		30
Isopropylbenzene	97		95		70-130	2		30
p-Isopropyltoluene	96		94		70-130	2		30
Naphthalene	94		95		70-130	1		30
Acrylonitrile	75		78		70-130	4		30
n-Propylbenzene	94		92		70-130	2		30
1,2,3-Trichlorobenzene	92		92		70-130	0		30
1,2,4-Trichlorobenzene	93		92		70-130	1		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	97		95		70-130	2		30
1,4-Dioxane	90		94		65-136	4		30
p-Diethylbenzene	95		93		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853111

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1194817-3 WG1194817-4								
p-Ethyltoluene	100		98		70-130	2		30
1,2,4,5-Tetramethylbenzene	96		95		70-130	1		30
Ethyl ether	75		76		67-130	1		30
trans-1,4-Dichloro-2-butene	85		87		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		97		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	111		111		70-130
Dibromofluoromethane	102		104		70-130

SEMIVOLATILES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01 D
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 21:49
 Analyst: ALS
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	1400	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	200	10
Hexachlorobenzene	ND		ug/kg	1000	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	240	10
2-Chloronaphthalene	ND		ug/kg	1800	170	10
1,2-Dichlorobenzene	ND		ug/kg	1800	310	10
1,3-Dichlorobenzene	ND		ug/kg	1800	300	10
1,4-Dichlorobenzene	ND		ug/kg	1800	310	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	470	10
2,4-Dinitrotoluene	ND		ug/kg	1800	350	10
2,6-Dinitrotoluene	ND		ug/kg	1800	300	10
Fluoranthene	1400		ug/kg	1000	200	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	190	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	270	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2100	300	10
Bis(2-chloroethoxy)methane	ND		ug/kg	1900	180	10
Hexachlorobutadiene	ND		ug/kg	1800	260	10
Hexachlorocyclopentadiene	ND		ug/kg	5000	1600	10
Hexachloroethane	ND		ug/kg	1400	280	10
Isophorone	ND		ug/kg	1600	230	10
Naphthalene	760	J	ug/kg	1800	210	10
Nitrobenzene	ND		ug/kg	1600	260	10
NDPA/DPA	ND		ug/kg	1400	200	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	270	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	610	10
Butyl benzyl phthalate	ND		ug/kg	1800	440	10
Di-n-butylphthalate	ND		ug/kg	1800	330	10
Di-n-octylphthalate	ND		ug/kg	1800	600	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-01 D

Date Collected: 12/26/18 09:45

Client ID: RB03_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	160	10
Dimethyl phthalate	ND		ug/kg	1800	370	10
Benzo(a)anthracene	1000		ug/kg	1000	200	10
Benzo(a)pyrene	1400		ug/kg	1400	430	10
Benzo(b)fluoranthene	1700		ug/kg	1000	300	10
Benzo(k)fluoranthene	580	J	ug/kg	1000	280	10
Chrysene	1100		ug/kg	1000	180	10
Acenaphthylene	400	J	ug/kg	1400	270	10
Anthracene	ND		ug/kg	1000	340	10
Benzo(ghi)perylene	1400		ug/kg	1400	210	10
Fluorene	ND		ug/kg	1800	170	10
Phenanthrene	490	J	ug/kg	1000	210	10
Dibenzo(a,h)anthracene	280	J	ug/kg	1000	200	10
Indeno(1,2,3-cd)pyrene	1300	J	ug/kg	1400	240	10
Pyrene	1400		ug/kg	1000	170	10
Biphenyl	ND		ug/kg	4000	410	10
4-Chloroaniline	ND		ug/kg	1800	320	10
2-Nitroaniline	ND		ug/kg	1800	340	10
3-Nitroaniline	ND		ug/kg	1800	330	10
4-Nitroaniline	ND		ug/kg	1800	720	10
Dibenzofuran	ND		ug/kg	1800	160	10
2-Methylnaphthalene	370	J	ug/kg	2100	210	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	180	10
Acetophenone	380	J	ug/kg	1800	220	10
2,4,6-Trichlorophenol	ND		ug/kg	1000	330	10
p-Chloro-m-cresol	ND		ug/kg	1800	260	10
2-Chlorophenol	ND		ug/kg	1800	210	10
2,4-Dichlorophenol	ND		ug/kg	1600	280	10
2,4-Dimethylphenol	ND		ug/kg	1800	580	10
2-Nitrophenol	ND		ug/kg	3800	660	10
4-Nitrophenol	ND		ug/kg	2400	720	10
2,4-Dinitrophenol	ND		ug/kg	8400	820	10
4,6-Dinitro-o-cresol	ND		ug/kg	4600	840	10
Pentachlorophenol	ND		ug/kg	1400	380	10
Phenol	ND		ug/kg	1800	260	10
2-Methylphenol	ND		ug/kg	1800	270	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2500	270	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01 D
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatiles Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	340	10
Benzoic Acid	ND		ug/kg	5700	1800	10
Benzyl Alcohol	ND		ug/kg	1800	540	10
Carbazole	ND		ug/kg	1800	170	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	65		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02 D
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 22:15
 Analyst: ALS
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	1500	190	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	210	10
Hexachlorobenzene	ND		ug/kg	1100	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	250	10
2-Chloronaphthalene	ND		ug/kg	1800	180	10
1,2-Dichlorobenzene	ND		ug/kg	1800	330	10
1,3-Dichlorobenzene	ND		ug/kg	1800	320	10
1,4-Dichlorobenzene	ND		ug/kg	1800	320	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	490	10
2,4-Dinitrotoluene	ND		ug/kg	1800	370	10
2,6-Dinitrotoluene	ND		ug/kg	1800	310	10
Fluoranthene	650	J	ug/kg	1100	210	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	200	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	280	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2200	310	10
Bis(2-chloroethoxy)methane	ND		ug/kg	2000	180	10
Hexachlorobutadiene	ND		ug/kg	1800	270	10
Hexachlorocyclopentadiene	ND		ug/kg	5200	1600	10
Hexachloroethane	ND		ug/kg	1500	300	10
Isophorone	ND		ug/kg	1600	240	10
Naphthalene	ND		ug/kg	1800	220	10
Nitrobenzene	ND		ug/kg	1600	270	10
NDPA/DPA	ND		ug/kg	1500	210	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	280	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	630	10
Butyl benzyl phthalate	ND		ug/kg	1800	460	10
Di-n-butylphthalate	ND		ug/kg	1800	350	10
Di-n-octylphthalate	ND		ug/kg	1800	620	10

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02 D

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	170	10
Dimethyl phthalate	ND		ug/kg	1800	380	10
Benzo(a)anthracene	520	J	ug/kg	1100	210	10
Benzo(a)pyrene	630	J	ug/kg	1500	450	10
Benzo(b)fluoranthene	700	J	ug/kg	1100	310	10
Benzo(k)fluoranthene	ND		ug/kg	1100	290	10
Chrysene	470	J	ug/kg	1100	190	10
Acenaphthylene	ND		ug/kg	1500	280	10
Anthracene	ND		ug/kg	1100	360	10
Benzo(ghi)perylene	700	J	ug/kg	1500	220	10
Fluorene	ND		ug/kg	1800	180	10
Phenanthrene	310	J	ug/kg	1100	220	10
Dibenzo(a,h)anthracene	ND		ug/kg	1100	210	10
Indeno(1,2,3-cd)pyrene	500	J	ug/kg	1500	260	10
Pyrene	720	J	ug/kg	1100	180	10
Biphenyl	ND		ug/kg	4200	420	10
4-Chloroaniline	ND		ug/kg	1800	330	10
2-Nitroaniline	ND		ug/kg	1800	350	10
3-Nitroaniline	ND		ug/kg	1800	340	10
4-Nitroaniline	ND		ug/kg	1800	760	10
Dibenzofuran	ND		ug/kg	1800	170	10
2-Methylnaphthalene	ND		ug/kg	2200	220	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	190	10
Acetophenone	ND		ug/kg	1800	230	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	350	10
p-Chloro-m-cresol	ND		ug/kg	1800	270	10
2-Chlorophenol	ND		ug/kg	1800	220	10
2,4-Dichlorophenol	ND		ug/kg	1600	290	10
2,4-Dimethylphenol	ND		ug/kg	1800	600	10
2-Nitrophenol	ND		ug/kg	4000	690	10
4-Nitrophenol	ND		ug/kg	2600	750	10
2,4-Dinitrophenol	ND		ug/kg	8800	850	10
4,6-Dinitro-o-cresol	ND		ug/kg	4800	880	10
Pentachlorophenol	ND		ug/kg	1500	400	10
Phenol	ND		ug/kg	1800	280	10
2-Methylphenol	ND		ug/kg	1800	280	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2600	290	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-02 D

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	350	10
Benzoic Acid	ND		ug/kg	5900	1800	10
Benzyl Alcohol	ND		ug/kg	1800	560	10
Carbazole	ND		ug/kg	1800	180	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		25-120
Phenol-d6	44		10-120
Nitrobenzene-d5	34		23-120
2-Fluorobiphenyl	43		30-120
2,4,6-Tribromophenol	25		10-136
4-Terphenyl-d14	38		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03 D
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 22:41
 Analyst: ALS
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	6500		ug/kg	1600	210	10
1,2,4-Trichlorobenzene	ND		ug/kg	2000	230	10
Hexachlorobenzene	ND		ug/kg	1200	220	10
Bis(2-chloroethyl)ether	ND		ug/kg	1800	270	10
2-Chloronaphthalene	ND		ug/kg	2000	200	10
1,2-Dichlorobenzene	ND		ug/kg	2000	360	10
1,3-Dichlorobenzene	ND		ug/kg	2000	340	10
1,4-Dichlorobenzene	ND		ug/kg	2000	350	10
3,3'-Dichlorobenzidine	ND		ug/kg	2000	530	10
2,4-Dinitrotoluene	ND		ug/kg	2000	400	10
2,6-Dinitrotoluene	ND		ug/kg	2000	340	10
Fluoranthene	16000		ug/kg	1200	230	10
4-Chlorophenyl phenyl ether	ND		ug/kg	2000	210	10
4-Bromophenyl phenyl ether	ND		ug/kg	2000	300	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2400	340	10
Bis(2-chloroethoxy)methane	ND		ug/kg	2200	200	10
Hexachlorobutadiene	ND		ug/kg	2000	290	10
Hexachlorocyclopentadiene	ND		ug/kg	5700	1800	10
Hexachloroethane	ND		ug/kg	1600	320	10
Isophorone	ND		ug/kg	1800	260	10
Naphthalene	3100		ug/kg	2000	240	10
Nitrobenzene	ND		ug/kg	1800	300	10
NDPA/DPA	ND		ug/kg	1600	230	10
n-Nitrosodi-n-propylamine	ND		ug/kg	2000	310	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	2000	690	10
Butyl benzyl phthalate	ND		ug/kg	2000	500	10
Di-n-butylphthalate	ND		ug/kg	2000	380	10
Di-n-octylphthalate	ND		ug/kg	2000	680	10

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03 D

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	2000	180	10
Dimethyl phthalate	ND		ug/kg	2000	420	10
Benzo(a)anthracene	8600		ug/kg	1200	220	10
Benzo(a)pyrene	9000		ug/kg	1600	490	10
Benzo(b)fluoranthene	6400		ug/kg	1200	340	10
Benzo(k)fluoranthene	1300		ug/kg	1200	320	10
Chrysene	8000		ug/kg	1200	210	10
Acenaphthylene	9800		ug/kg	1600	310	10
Anthracene	2600		ug/kg	1200	390	10
Benzo(ghi)perylene	5300		ug/kg	1600	230	10
Fluorene	11000		ug/kg	2000	190	10
Phenanthrene	3400		ug/kg	1200	240	10
Dibenzo(a,h)anthracene	780	J	ug/kg	1200	230	10
Indeno(1,2,3-cd)pyrene	3400		ug/kg	1600	280	10
Pyrene	31000		ug/kg	1200	200	10
Biphenyl	500	J	ug/kg	4500	460	10
4-Chloroaniline	ND		ug/kg	2000	360	10
2-Nitroaniline	ND		ug/kg	2000	380	10
3-Nitroaniline	ND		ug/kg	2000	380	10
4-Nitroaniline	ND		ug/kg	2000	820	10
Dibenzofuran	660	J	ug/kg	2000	190	10
2-Methylnaphthalene	610	J	ug/kg	2400	240	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	2000	210	10
Acetophenone	ND		ug/kg	2000	250	10
2,4,6-Trichlorophenol	ND		ug/kg	1200	380	10
p-Chloro-m-cresol	ND		ug/kg	2000	300	10
2-Chlorophenol	ND		ug/kg	2000	240	10
2,4-Dichlorophenol	ND		ug/kg	1800	320	10
2,4-Dimethylphenol	ND		ug/kg	2000	660	10
2-Nitrophenol	ND		ug/kg	4300	750	10
4-Nitrophenol	ND		ug/kg	2800	810	10
2,4-Dinitrophenol	ND		ug/kg	9600	930	10
4,6-Dinitro-o-cresol	ND		ug/kg	5200	960	10
Pentachlorophenol	ND		ug/kg	1600	440	10
Phenol	ND		ug/kg	2000	300	10
2-Methylphenol	ND		ug/kg	2000	310	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2900	310	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03 D
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	2000	380	10
Benzoic Acid	ND		ug/kg	6500	2000	10
Benzyl Alcohol	ND		ug/kg	2000	610	10
Carbazole	290	J	ug/kg	2000	190	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	63		10-136
4-Terphenyl-d14	64		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04 D
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 23:08
 Analyst: ALS
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	4000		ug/kg	1400	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	200	10
Hexachlorobenzene	ND		ug/kg	1100	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	240	10
2-Chloronaphthalene	ND		ug/kg	1800	180	10
1,2-Dichlorobenzene	ND		ug/kg	1800	320	10
1,3-Dichlorobenzene	ND		ug/kg	1800	310	10
1,4-Dichlorobenzene	ND		ug/kg	1800	310	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	480	10
2,4-Dinitrotoluene	ND		ug/kg	1800	360	10
2,6-Dinitrotoluene	ND		ug/kg	1800	310	10
Fluoranthene	41000		ug/kg	1100	200	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	190	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	270	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2100	300	10
Bis(2-chloroethoxy)methane	ND		ug/kg	1900	180	10
Hexachlorobutadiene	ND		ug/kg	1800	260	10
Hexachlorocyclopentadiene	ND		ug/kg	5100	1600	10
Hexachloroethane	ND		ug/kg	1400	290	10
Isophorone	ND		ug/kg	1600	230	10
Naphthalene	1200	J	ug/kg	1800	220	10
Nitrobenzene	ND		ug/kg	1600	260	10
NDPA/DPA	ND		ug/kg	1400	200	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	280	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	620	10
Butyl benzyl phthalate	ND		ug/kg	1800	450	10
Di-n-butylphthalate	ND		ug/kg	1800	340	10
Di-n-octylphthalate	ND		ug/kg	1800	610	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-04 D

Date Collected: 12/26/18 11:55

Client ID: RB12_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	160	10
Dimethyl phthalate	ND		ug/kg	1800	380	10
Benzo(a)anthracene	20000		ug/kg	1100	200	10
Benzo(a)pyrene	19000		ug/kg	1400	440	10
Benzo(b)fluoranthene	24000		ug/kg	1100	300	10
Benzo(k)fluoranthene	8200		ug/kg	1100	290	10
Chrysene	18000		ug/kg	1100	190	10
Acenaphthylene	2000		ug/kg	1400	280	10
Anthracene	10000		ug/kg	1100	350	10
Benzo(ghi)perylene	11000		ug/kg	1400	210	10
Fluorene	3400		ug/kg	1800	170	10
Phenanthrene	35000		ug/kg	1100	220	10
Dibenzo(a,h)anthracene	2800		ug/kg	1100	210	10
Indeno(1,2,3-cd)pyrene	12000		ug/kg	1400	250	10
Pyrene	34000		ug/kg	1100	180	10
Biphenyl	ND		ug/kg	4100	420	10
4-Chloroaniline	ND		ug/kg	1800	320	10
2-Nitroaniline	ND		ug/kg	1800	340	10
3-Nitroaniline	ND		ug/kg	1800	340	10
4-Nitroaniline	ND		ug/kg	1800	740	10
Dibenzofuran	2600		ug/kg	1800	170	10
2-Methylnaphthalene	940	J	ug/kg	2100	220	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	190	10
Acetophenone	ND		ug/kg	1800	220	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	340	10
p-Chloro-m-cresol	ND		ug/kg	1800	270	10
2-Chlorophenol	ND		ug/kg	1800	210	10
2,4-Dichlorophenol	ND		ug/kg	1600	290	10
2,4-Dimethylphenol	ND		ug/kg	1800	590	10
2-Nitrophenol	ND		ug/kg	3900	670	10
4-Nitrophenol	ND		ug/kg	2500	730	10
2,4-Dinitrophenol	ND		ug/kg	8600	830	10
4,6-Dinitro-o-cresol	ND		ug/kg	4600	860	10
Pentachlorophenol	ND		ug/kg	1400	390	10
Phenol	ND		ug/kg	1800	270	10
2-Methylphenol	ND		ug/kg	1800	280	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2600	280	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-04 D

Date Collected: 12/26/18 11:55

Client ID: RB12_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	340	10
Benzoic Acid	ND		ug/kg	5800	1800	10
Benzyl Alcohol	ND		ug/kg	1800	550	10
Carbazole	2300		ug/kg	1800	170	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	53		10-136
4-Terphenyl-d14	70		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 23:34
 Analyst: ALS
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	820	J	ug/kg	1400	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	200	10
Hexachlorobenzene	ND		ug/kg	1100	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	240	10
2-Chloronaphthalene	ND		ug/kg	1800	180	10
1,2-Dichlorobenzene	ND		ug/kg	1800	320	10
1,3-Dichlorobenzene	ND		ug/kg	1800	300	10
1,4-Dichlorobenzene	ND		ug/kg	1800	310	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	470	10
2,4-Dinitrotoluene	ND		ug/kg	1800	360	10
2,6-Dinitrotoluene	ND		ug/kg	1800	300	10
Fluoranthene	23000		ug/kg	1100	200	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	190	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	270	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2100	300	10
Bis(2-chloroethoxy)methane	ND		ug/kg	1900	180	10
Hexachlorobutadiene	ND		ug/kg	1800	260	10
Hexachlorocyclopentadiene	ND		ug/kg	5100	1600	10
Hexachloroethane	ND		ug/kg	1400	290	10
Isophorone	ND		ug/kg	1600	230	10
Naphthalene	2700		ug/kg	1800	220	10
Nitrobenzene	ND		ug/kg	1600	260	10
NDPA/DPA	ND		ug/kg	1400	200	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	270	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	610	10
Butyl benzyl phthalate	ND		ug/kg	1800	450	10
Di-n-butylphthalate	ND		ug/kg	1800	340	10
Di-n-octylphthalate	ND		ug/kg	1800	600	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-05 D

Date Collected: 12/26/18 12:00

Client ID: RB12_8-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	160	10
Dimethyl phthalate	ND		ug/kg	1800	370	10
Benzo(a)anthracene	12000		ug/kg	1100	200	10
Benzo(a)pyrene	12000		ug/kg	1400	430	10
Benzo(b)fluoranthene	13000		ug/kg	1100	300	10
Benzo(k)fluoranthene	4700		ug/kg	1100	280	10
Chrysene	11000		ug/kg	1100	180	10
Acenaphthylene	6600		ug/kg	1400	270	10
Anthracene	5100		ug/kg	1100	350	10
Benzo(ghi)perylene	12000		ug/kg	1400	210	10
Fluorene	1500	J	ug/kg	1800	170	10
Phenanthrene	15000		ug/kg	1100	220	10
Dibenzo(a,h)anthracene	2000		ug/kg	1100	200	10
Indeno(1,2,3-cd)pyrene	10000		ug/kg	1400	250	10
Pyrene	22000		ug/kg	1100	180	10
Biphenyl	ND		ug/kg	4000	410	10
4-Chloroaniline	ND		ug/kg	1800	320	10
2-Nitroaniline	ND		ug/kg	1800	340	10
3-Nitroaniline	ND		ug/kg	1800	340	10
4-Nitroaniline	ND		ug/kg	1800	740	10
Dibenzofuran	770	J	ug/kg	1800	170	10
2-Methylnaphthalene	820	J	ug/kg	2100	210	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	180	10
Acetophenone	ND		ug/kg	1800	220	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	340	10
p-Chloro-m-cresol	ND		ug/kg	1800	260	10
2-Chlorophenol	ND		ug/kg	1800	210	10
2,4-Dichlorophenol	ND		ug/kg	1600	280	10
2,4-Dimethylphenol	ND		ug/kg	1800	590	10
2-Nitrophenol	ND		ug/kg	3800	670	10
4-Nitrophenol	ND		ug/kg	2500	720	10
2,4-Dinitrophenol	ND		ug/kg	8500	830	10
4,6-Dinitro-o-cresol	ND		ug/kg	4600	850	10
Pentachlorophenol	ND		ug/kg	1400	390	10
Phenol	ND		ug/kg	1800	270	10
2-Methylphenol	ND		ug/kg	1800	280	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2600	280	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	340	10
Benzoic Acid	ND		ug/kg	5800	1800	10
Benzyl Alcohol	ND		ug/kg	1800	540	10
Carbazole	520	J	ug/kg	1800	170	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	80		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 18:19
 Analyst: ALS
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	160		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	3100		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	530		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-06

Date Collected: 12/26/18 12:05

Client ID: RB12_9-10

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	2000		ug/kg	110	21.	1
Benzo(a)pyrene	2600		ug/kg	150	45.	1
Benzo(b)fluoranthene	3100		ug/kg	110	31.	1
Benzo(k)fluoranthene	1000		ug/kg	110	30.	1
Chrysene	1800		ug/kg	110	19.	1
Acenaphthylene	72	J	ug/kg	150	28.	1
Anthracene	350		ug/kg	110	36.	1
Benzo(ghi)perylene	2000		ug/kg	150	22.	1
Fluorene	130	J	ug/kg	180	18.	1
Phenanthrene	1200		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	380		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	2000		ug/kg	150	26.	1
Pyrene	3200		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	88	J	ug/kg	180	17.	1
2-Methylnaphthalene	74	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
Client ID: RB12_9-10
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	82	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	83		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	92		10-136
4-Terphenyl-d14	73		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07 D
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 20:30
 Analyst: ALS
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1100		ug/kg	290	38.	2
1,2,4-Trichlorobenzene	ND		ug/kg	370	42.	2
Hexachlorobenzene	ND		ug/kg	220	41.	2
Bis(2-chloroethyl)ether	ND		ug/kg	330	50.	2
2-Chloronaphthalene	ND		ug/kg	370	36.	2
1,2-Dichlorobenzene	ND		ug/kg	370	66.	2
1,3-Dichlorobenzene	ND		ug/kg	370	63.	2
1,4-Dichlorobenzene	ND		ug/kg	370	64.	2
3,3'-Dichlorobenzidine	ND		ug/kg	370	97.	2
2,4-Dinitrotoluene	ND		ug/kg	370	73.	2
2,6-Dinitrotoluene	ND		ug/kg	370	63.	2
Fluoranthene	7600		ug/kg	220	42.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	370	39.	2
4-Bromophenyl phenyl ether	ND		ug/kg	370	56.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	440	62.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	400	37.	2
Hexachlorobutadiene	ND		ug/kg	370	54.	2
Hexachlorocyclopentadiene	ND		ug/kg	1000	330	2
Hexachloroethane	ND		ug/kg	290	59.	2
Isophorone	ND		ug/kg	330	48.	2
Naphthalene	2600		ug/kg	370	44.	2
Nitrobenzene	ND		ug/kg	330	54.	2
NDPA/DPA	ND		ug/kg	290	42.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	370	56.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	370	130	2
Butyl benzyl phthalate	ND		ug/kg	370	92.	2
Di-n-butylphthalate	ND		ug/kg	370	69.	2
Di-n-octylphthalate	ND		ug/kg	370	120	2

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-07 D

Date Collected: 12/26/18 12:10

Client ID: RB12_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	370	34.	2
Dimethyl phthalate	ND		ug/kg	370	77.	2
Benzo(a)anthracene	3500		ug/kg	220	41.	2
Benzo(a)pyrene	3600		ug/kg	290	89.	2
Benzo(b)fluoranthene	4000		ug/kg	220	62.	2
Benzo(k)fluoranthene	1400		ug/kg	220	58.	2
Chrysene	3900		ug/kg	220	38.	2
Acenaphthylene	1000		ug/kg	290	56.	2
Anthracene	2200		ug/kg	220	71.	2
Benzo(ghi)perylene	2000		ug/kg	290	43.	2
Fluorene	1500		ug/kg	370	36.	2
Phenanthrene	8700		ug/kg	220	44.	2
Dibenzo(a,h)anthracene	570		ug/kg	220	42.	2
Indeno(1,2,3-cd)pyrene	2100		ug/kg	290	51.	2
Pyrene	7500		ug/kg	220	36.	2
Biphenyl	240	J	ug/kg	830	85.	2
4-Chloroaniline	ND		ug/kg	370	67.	2
2-Nitroaniline	ND		ug/kg	370	70.	2
3-Nitroaniline	ND		ug/kg	370	69.	2
4-Nitroaniline	ND		ug/kg	370	150	2
Dibenzofuran	1000		ug/kg	370	35.	2
2-Methylnaphthalene	650		ug/kg	440	44.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	370	38.	2
Acetophenone	140	J	ug/kg	370	45.	2
2,4,6-Trichlorophenol	ND		ug/kg	220	69.	2
p-Chloro-m-cresol	ND		ug/kg	370	54.	2
2-Chlorophenol	ND		ug/kg	370	43.	2
2,4-Dichlorophenol	ND		ug/kg	330	59.	2
2,4-Dimethylphenol	ND		ug/kg	370	120	2
2-Nitrophenol	ND		ug/kg	790	140	2
4-Nitrophenol	ND		ug/kg	510	150	2
2,4-Dinitrophenol	ND		ug/kg	1800	170	2
4,6-Dinitro-o-cresol	ND		ug/kg	950	180	2
Pentachlorophenol	ND		ug/kg	290	80.	2
Phenol	72	J	ug/kg	370	55.	2
2-Methylphenol	ND		ug/kg	370	57.	2
3-Methylphenol/4-Methylphenol	89	J	ug/kg	530	57.	2

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-07 D

Date Collected: 12/26/18 12:10

Client ID: RB12_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	370	70.	2
Benzoic Acid	ND		ug/kg	1200	370	2
Benzyl Alcohol	ND		ug/kg	370	110	2
Carbazole	930		ug/kg	370	36.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	71		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08 D
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 20:56
 Analyst: ALS
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	280	36.	2
1,2,4-Trichlorobenzene	ND		ug/kg	350	40.	2
Hexachlorobenzene	ND		ug/kg	210	39.	2
Bis(2-chloroethyl)ether	ND		ug/kg	320	48.	2
2-Chloronaphthalene	ND		ug/kg	350	35.	2
1,2-Dichlorobenzene	ND		ug/kg	350	63.	2
1,3-Dichlorobenzene	ND		ug/kg	350	60.	2
1,4-Dichlorobenzene	ND		ug/kg	350	61.	2
3,3'-Dichlorobenzidine	ND		ug/kg	350	93.	2
2,4-Dinitrotoluene	ND		ug/kg	350	70.	2
2,6-Dinitrotoluene	ND		ug/kg	350	60.	2
Fluoranthene	640		ug/kg	210	40.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	350	37.	2
4-Bromophenyl phenyl ether	ND		ug/kg	350	53.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	420	60.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	380	35.	2
Hexachlorobutadiene	ND		ug/kg	350	51.	2
Hexachlorocyclopentadiene	ND		ug/kg	1000	320	2
Hexachloroethane	ND		ug/kg	280	57.	2
Isophorone	ND		ug/kg	320	45.	2
Naphthalene	47	J	ug/kg	350	43.	2
Nitrobenzene	ND		ug/kg	320	52.	2
NDPA/DPA	ND		ug/kg	280	40.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	350	54.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	350	120	2
Butyl benzyl phthalate	ND		ug/kg	350	88.	2
Di-n-butylphthalate	ND		ug/kg	350	66.	2
Di-n-octylphthalate	ND		ug/kg	350	120	2

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-08 D

Date Collected: 12/26/18 13:25

Client ID: RB02_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	350	32.	2
Dimethyl phthalate	ND		ug/kg	350	74.	2
Benzo(a)anthracene	460		ug/kg	210	39.	2
Benzo(a)pyrene	470		ug/kg	280	86.	2
Benzo(b)fluoranthene	610		ug/kg	210	59.	2
Benzo(k)fluoranthene	180	J	ug/kg	210	56.	2
Chrysene	520		ug/kg	210	36.	2
Acenaphthylene	100	J	ug/kg	280	54.	2
Anthracene	96	J	ug/kg	210	68.	2
Benzo(ghi)perylene	340		ug/kg	280	41.	2
Fluorene	37	J	ug/kg	350	34.	2
Phenanthrene	510		ug/kg	210	43.	2
Dibenzo(a,h)anthracene	87	J	ug/kg	210	40.	2
Indeno(1,2,3-cd)pyrene	320		ug/kg	280	49.	2
Pyrene	700		ug/kg	210	35.	2
Biphenyl	ND		ug/kg	800	81.	2
4-Chloroaniline	ND		ug/kg	350	64.	2
2-Nitroaniline	ND		ug/kg	350	68.	2
3-Nitroaniline	ND		ug/kg	350	66.	2
4-Nitroaniline	ND		ug/kg	350	140	2
Dibenzofuran	ND		ug/kg	350	33.	2
2-Methylnaphthalene	ND		ug/kg	420	42.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	350	36.	2
Acetophenone	ND		ug/kg	350	43.	2
2,4,6-Trichlorophenol	ND		ug/kg	210	66.	2
p-Chloro-m-cresol	ND		ug/kg	350	52.	2
2-Chlorophenol	ND		ug/kg	350	41.	2
2,4-Dichlorophenol	ND		ug/kg	320	56.	2
2,4-Dimethylphenol	ND		ug/kg	350	120	2
2-Nitrophenol	ND		ug/kg	760	130	2
4-Nitrophenol	ND		ug/kg	490	140	2
2,4-Dinitrophenol	ND		ug/kg	1700	160	2
4,6-Dinitro-o-cresol	ND		ug/kg	910	170	2
Pentachlorophenol	ND		ug/kg	280	77.	2
Phenol	ND		ug/kg	350	53.	2
2-Methylphenol	ND		ug/kg	350	54.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	500	55.	2

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08 D
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	350	67.	2
Benzoic Acid	ND		ug/kg	1100	350	2
Benzyl Alcohol	ND		ug/kg	350	110	2
Carbazole	ND		ug/kg	350	34.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	61		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	62		10-136
4-Terphenyl-d14	59		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 21:23
 Analyst: ALS
 Percent Solids: 70%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	120	J	ug/kg	370	48.	2
1,2,4-Trichlorobenzene	ND		ug/kg	470	53.	2
Hexachlorobenzene	ND		ug/kg	280	52.	2
Bis(2-chloroethyl)ether	ND		ug/kg	420	63.	2
2-Chloronaphthalene	ND		ug/kg	470	46.	2
1,2-Dichlorobenzene	ND		ug/kg	470	84.	2
1,3-Dichlorobenzene	ND		ug/kg	470	80.	2
1,4-Dichlorobenzene	ND		ug/kg	470	82.	2
3,3'-Dichlorobenzidine	ND		ug/kg	470	120	2
2,4-Dinitrotoluene	ND		ug/kg	470	94.	2
2,6-Dinitrotoluene	ND		ug/kg	470	80.	2
Fluoranthene	1100		ug/kg	280	54.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	470	50.	2
4-Bromophenyl phenyl ether	ND		ug/kg	470	71.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	560	80.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	500	47.	2
Hexachlorobutadiene	ND		ug/kg	470	68.	2
Hexachlorocyclopentadiene	ND		ug/kg	1300	420	2
Hexachloroethane	ND		ug/kg	370	76.	2
Isophorone	ND		ug/kg	420	61.	2
Naphthalene	1500		ug/kg	470	57.	2
Nitrobenzene	ND		ug/kg	420	69.	2
NDPA/DPA	ND		ug/kg	370	53.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	470	72.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	470	160	2
Butyl benzyl phthalate	ND		ug/kg	470	120	2
Di-n-butylphthalate	ND		ug/kg	470	89.	2
Di-n-octylphthalate	ND		ug/kg	470	160	2

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D

Date Collected: 12/26/18 13:30

Client ID: RB02_7-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	470	43.	2
Dimethyl phthalate	ND		ug/kg	470	98.	2
Benzo(a)anthracene	820		ug/kg	280	53.	2
Benzo(a)pyrene	3100		ug/kg	370	110	2
Benzo(b)fluoranthene	2700		ug/kg	280	79.	2
Benzo(k)fluoranthene	520		ug/kg	280	75.	2
Chrysene	1000		ug/kg	280	49.	2
Acenaphthylene	2800		ug/kg	370	72.	2
Anthracene	570		ug/kg	280	91.	2
Benzo(ghi)perylene	5400		ug/kg	370	55.	2
Fluorene	360	J	ug/kg	470	45.	2
Phenanthrene	1100		ug/kg	280	57.	2
Dibenzo(a,h)anthracene	540		ug/kg	280	54.	2
Indeno(1,2,3-cd)pyrene	2600		ug/kg	370	65.	2
Pyrene	1800		ug/kg	280	46.	2
Biphenyl	210	J	ug/kg	1100	110	2
4-Chloroaniline	ND		ug/kg	470	85.	2
2-Nitroaniline	ND		ug/kg	470	90.	2
3-Nitroaniline	ND		ug/kg	470	88.	2
4-Nitroaniline	ND		ug/kg	470	190	2
Dibenzofuran	ND		ug/kg	470	44.	2
2-Methylnaphthalene	450	J	ug/kg	560	56.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	470	49.	2
Acetophenone	180	J	ug/kg	470	58.	2
2,4,6-Trichlorophenol	ND		ug/kg	280	89.	2
p-Chloro-m-cresol	ND		ug/kg	470	70.	2
2-Chlorophenol	ND		ug/kg	470	55.	2
2,4-Dichlorophenol	ND		ug/kg	420	75.	2
2,4-Dimethylphenol	ND		ug/kg	470	150	2
2-Nitrophenol	ND		ug/kg	1000	180	2
4-Nitrophenol	ND		ug/kg	650	190	2
2,4-Dinitrophenol	ND		ug/kg	2200	220	2
4,6-Dinitro-o-cresol	ND		ug/kg	1200	220	2
Pentachlorophenol	ND		ug/kg	370	100	2
Phenol	ND		ug/kg	470	70.	2
2-Methylphenol	ND		ug/kg	470	72.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	670	73.	2

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	470	90.	2
Benzoic Acid	ND		ug/kg	1500	470	2
Benzyl Alcohol	ND		ug/kg	470	140	2
Carbazole	ND		ug/kg	470	45.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	64		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10 D
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/01/19 00:00
 Analyst: ALS
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	250	J	ug/kg	1400	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1800	200	10
Hexachlorobenzene	ND		ug/kg	1100	200	10
Bis(2-chloroethyl)ether	ND		ug/kg	1600	240	10
2-Chloronaphthalene	ND		ug/kg	1800	180	10
1,2-Dichlorobenzene	ND		ug/kg	1800	320	10
1,3-Dichlorobenzene	ND		ug/kg	1800	310	10
1,4-Dichlorobenzene	ND		ug/kg	1800	310	10
3,3'-Dichlorobenzidine	ND		ug/kg	1800	480	10
2,4-Dinitrotoluene	ND		ug/kg	1800	360	10
2,6-Dinitrotoluene	ND		ug/kg	1800	310	10
Fluoranthene	4400		ug/kg	1100	200	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1800	190	10
4-Bromophenyl phenyl ether	ND		ug/kg	1800	270	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2100	300	10
Bis(2-chloroethoxy)methane	ND		ug/kg	1900	180	10
Hexachlorobutadiene	ND		ug/kg	1800	260	10
Hexachlorocyclopentadiene	ND		ug/kg	5100	1600	10
Hexachloroethane	ND		ug/kg	1400	290	10
Isophorone	ND		ug/kg	1600	230	10
Naphthalene	360	J	ug/kg	1800	220	10
Nitrobenzene	ND		ug/kg	1600	260	10
NDPA/DPA	ND		ug/kg	1400	200	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1800	280	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1800	620	10
Butyl benzyl phthalate	ND		ug/kg	1800	450	10
Di-n-butylphthalate	ND		ug/kg	1800	340	10
Di-n-octylphthalate	ND		ug/kg	1800	610	10

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-10 D

Date Collected: 12/26/18 13:35

Client ID: RB02_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1800	160	10
Dimethyl phthalate	ND		ug/kg	1800	380	10
Benzo(a)anthracene	2400		ug/kg	1100	200	10
Benzo(a)pyrene	2500		ug/kg	1400	440	10
Benzo(b)fluoranthene	2800		ug/kg	1100	300	10
Benzo(k)fluoranthene	1000	J	ug/kg	1100	290	10
Chrysene	2100		ug/kg	1100	190	10
Acenaphthylene	290	J	ug/kg	1400	280	10
Anthracene	940	J	ug/kg	1100	350	10
Benzo(ghi)perylene	1500		ug/kg	1400	210	10
Fluorene	270	J	ug/kg	1800	170	10
Phenanthrene	3200		ug/kg	1100	220	10
Dibenzo(a,h)anthracene	340	J	ug/kg	1100	210	10
Indeno(1,2,3-cd)pyrene	1600		ug/kg	1400	250	10
Pyrene	4100		ug/kg	1100	180	10
Biphenyl	ND		ug/kg	4100	420	10
4-Chloroaniline	ND		ug/kg	1800	320	10
2-Nitroaniline	ND		ug/kg	1800	340	10
3-Nitroaniline	ND		ug/kg	1800	340	10
4-Nitroaniline	ND		ug/kg	1800	740	10
Dibenzofuran	220	J	ug/kg	1800	170	10
2-Methylnaphthalene	ND		ug/kg	2100	220	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1800	190	10
Acetophenone	ND		ug/kg	1800	220	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	340	10
p-Chloro-m-cresol	ND		ug/kg	1800	270	10
2-Chlorophenol	ND		ug/kg	1800	210	10
2,4-Dichlorophenol	ND		ug/kg	1600	290	10
2,4-Dimethylphenol	ND		ug/kg	1800	590	10
2-Nitrophenol	ND		ug/kg	3900	670	10
4-Nitrophenol	ND		ug/kg	2500	730	10
2,4-Dinitrophenol	ND		ug/kg	8600	830	10
4,6-Dinitro-o-cresol	ND		ug/kg	4600	860	10
Pentachlorophenol	ND		ug/kg	1400	390	10
Phenol	ND		ug/kg	1800	270	10
2-Methylphenol	ND		ug/kg	1800	280	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2600	280	10

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10 D
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1800	340	10
Benzoic Acid	ND		ug/kg	5800	1800	10
Benzyl Alcohol	ND		ug/kg	1800	550	10
Carbazole	260	J	ug/kg	1800	170	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		25-120
Phenol-d6	51		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	42		10-136
4-Terphenyl-d14	50		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 12/31/18 18:45
 Analyst: ALS
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	700		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	3100		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	1100		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	1900		ug/kg	120	22.	1
Benzo(a)pyrene	1900		ug/kg	160	49.	1
Benzo(b)fluoranthene	2300		ug/kg	120	34.	1
Benzo(k)fluoranthene	630		ug/kg	120	32.	1
Chrysene	1600		ug/kg	120	21.	1
Acenaphthylene	130	J	ug/kg	160	31.	1
Anthracene	730		ug/kg	120	39.	1
Benzo(ghi)perylene	1200		ug/kg	160	23.	1
Fluorene	340		ug/kg	200	19.	1
Phenanthrene	1800		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	250		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	1300		ug/kg	160	28.	1
Pyrene	3600		ug/kg	120	20.	1
Biphenyl	78	J	ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	200		ug/kg	200	19.	1
2-Methylnaphthalene	75	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	960	93.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	96.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	34	J	ug/kg	290	31.	1

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	650	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	200		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	61		18-120

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/30/18 22:04
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1193171-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/30/18 22:04
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1193171-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 12/30/18 22:04
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 12/27/18 14:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-11 Batch: WG1193171-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	90		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1193171-2 WG1193171-3								
Acenaphthene	57		72		31-137	23		50
1,2,4-Trichlorobenzene	59		81		38-107	31		50
Hexachlorobenzene	72		90		40-140	22		50
Bis(2-chloroethyl)ether	53		72		40-140	30		50
2-Chloronaphthalene	67		86		40-140	25		50
1,2-Dichlorobenzene	55		70		40-140	24		50
1,3-Dichlorobenzene	53		68		40-140	25		50
1,4-Dichlorobenzene	54		69		28-104	24		50
3,3'-Dichlorobenzidine	58		61		40-140	5		50
2,4-Dinitrotoluene	64		81		40-132	23		50
2,6-Dinitrotoluene	74		95		40-140	25		50
Fluoranthene	74		92		40-140	22		50
4-Chlorophenyl phenyl ether	63		78		40-140	21		50
4-Bromophenyl phenyl ether	67		86		40-140	25		50
Bis(2-chloroisopropyl)ether	54		72		40-140	29		50
Bis(2-chloroethoxy)methane	60		79		40-117	27		50
Hexachlorobutadiene	61		81		40-140	28		50
Hexachlorocyclopentadiene	55		78		40-140	35		50
Hexachloroethane	51		66		40-140	26		50
Isophorone	62		81		40-140	27		50
Naphthalene	58		77		40-140	28		50
Nitrobenzene	56		74		40-140	28		50
NDPA/DPA	65		82		36-157	23		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1193171-2 WG1193171-3								
n-Nitrosodi-n-propylamine	60		79		32-121	27		50
Bis(2-ethylhexyl)phthalate	64		81		40-140	23		50
Butyl benzyl phthalate	71		88		40-140	21		50
Di-n-butylphthalate	71		89		40-140	23		50
Di-n-octylphthalate	65		82		40-140	23		50
Diethyl phthalate	62		77		40-140	22		50
Dimethyl phthalate	75		96		40-140	25		50
Benzo(a)anthracene	66		82		40-140	22		50
Benzo(a)pyrene	74		89		40-140	18		50
Benzo(b)fluoranthene	71		87		40-140	20		50
Benzo(k)fluoranthene	75		92		40-140	20		50
Chrysene	68		84		40-140	21		50
Acenaphthylene	72		91		40-140	23		50
Anthracene	71		87		40-140	20		50
Benzo(ghi)perylene	72		88		40-140	20		50
Fluorene	64		80		40-140	22		50
Phenanthrene	68		82		40-140	19		50
Dibenzo(a,h)anthracene	73		88		40-140	19		50
Indeno(1,2,3-cd)pyrene	71		88		40-140	21		50
Pyrene	75		91		35-142	19		50
Biphenyl	69		88		54-104	24		50
4-Chloroaniline	52		58		40-140	11		50
2-Nitroaniline	73		93		47-134	24		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1193171-2 WG1193171-3								
3-Nitroaniline	51		59		26-129	15		50
4-Nitroaniline	58		74		41-125	24		50
Dibenzofuran	61		75		40-140	21		50
2-Methylnaphthalene	63		82		40-140	26		50
1,2,4,5-Tetrachlorobenzene	68		90		40-117	28		50
Acetophenone	59		78		14-144	28		50
2,4,6-Trichlorophenol	77		95		30-130	21		50
p-Chloro-m-cresol	75		95		26-103	24		50
2-Chlorophenol	59		79		25-102	29		50
2,4-Dichlorophenol	70		90		30-130	25		50
2,4-Dimethylphenol	68		90		30-130	28		50
2-Nitrophenol	61		79		30-130	26		50
4-Nitrophenol	59		78		11-114	28		50
2,4-Dinitrophenol	56		76		4-130	30		50
4,6-Dinitro-o-cresol	64		83		10-130	26		50
Pentachlorophenol	67		90		17-109	29		50
Phenol	61		80		26-90	27		50
2-Methylphenol	62		82		30-130.	28		50
3-Methylphenol/4-Methylphenol	64		83		30-130	26		50
2,4,5-Trichlorophenol	77		101		30-130	27		50
Benzoic Acid	32		50		10-110	44		50
Benzyl Alcohol	63		87		40-140	32		50
Carbazole	70		85		54-128	19		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-11 Batch: WG1193171-2 WG1193171-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	55		73		25-120
Phenol-d6	60		80		10-120
Nitrobenzene-d5	56		74		23-120
2-Fluorobiphenyl	69		88		30-120
2,4,6-Tribromophenol	73		93		10-136
4-Terphenyl-d14	74		92		18-120

PCBS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/30/18 22:30
 Analyst: WR
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.0	3.11	1	A
Aroclor 1221	ND		ug/kg	35.0	3.51	1	A
Aroclor 1232	ND		ug/kg	35.0	7.42	1	A
Aroclor 1242	ND		ug/kg	35.0	4.72	1	A
Aroclor 1248	ND		ug/kg	35.0	5.25	1	A
Aroclor 1254	ND		ug/kg	35.0	3.83	1	A
Aroclor 1260	ND		ug/kg	35.0	6.47	1	A
Aroclor 1262	ND		ug/kg	35.0	4.44	1	A
Aroclor 1268	ND		ug/kg	35.0	3.62	1	A
PCBs, Total	ND		ug/kg	35.0	3.11	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/30/18 22:43
 Analyst: WR
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.2	3.22	1	A
Aroclor 1221	ND		ug/kg	36.2	3.63	1	A
Aroclor 1232	ND		ug/kg	36.2	7.68	1	A
Aroclor 1242	ND		ug/kg	36.2	4.88	1	A
Aroclor 1248	ND		ug/kg	36.2	5.43	1	A
Aroclor 1254	ND		ug/kg	36.2	3.96	1	A
Aroclor 1260	ND		ug/kg	36.2	6.69	1	A
Aroclor 1262	ND		ug/kg	36.2	4.60	1	A
Aroclor 1268	ND		ug/kg	36.2	3.75	1	A
PCBs, Total	ND		ug/kg	36.2	3.22	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/03/19 12:36
 Analyst: WR
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	40.1	3.56	1	A
Aroclor 1221	ND		ug/kg	40.1	4.02	1	A
Aroclor 1232	ND		ug/kg	40.1	8.51	1	A
Aroclor 1242	ND		ug/kg	40.1	5.41	1	A
Aroclor 1248	ND		ug/kg	40.1	6.02	1	A
Aroclor 1254	ND		ug/kg	40.1	4.39	1	A
Aroclor 1260	ND		ug/kg	40.1	7.42	1	A
Aroclor 1262	ND		ug/kg	40.1	5.10	1	A
Aroclor 1268	ND		ug/kg	40.1	4.16	1	A
PCBs, Total	ND		ug/kg	40.1	3.56	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:03
 Analyst: WR
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.0	3.11	1	A
Aroclor 1221	ND		ug/kg	35.0	3.51	1	A
Aroclor 1232	ND		ug/kg	35.0	7.43	1	A
Aroclor 1242	ND		ug/kg	35.0	4.72	1	A
Aroclor 1248	ND		ug/kg	35.0	5.26	1	A
Aroclor 1254	ND		ug/kg	35.0	3.84	1	A
Aroclor 1260	ND		ug/kg	35.0	6.48	1	A
Aroclor 1262	ND		ug/kg	35.0	4.45	1	A
Aroclor 1268	ND		ug/kg	35.0	3.63	1	A
PCBs, Total	ND		ug/kg	35.0	3.11	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	109		30-150	A
Decachlorobiphenyl	99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	117		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:16
 Analyst: WR
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.4	3.14	1	A
Aroclor 1221	ND		ug/kg	35.4	3.55	1	A
Aroclor 1232	ND		ug/kg	35.4	7.51	1	A
Aroclor 1242	ND		ug/kg	35.4	4.77	1	A
Aroclor 1248	ND		ug/kg	35.4	5.31	1	A
Aroclor 1254	ND		ug/kg	35.4	3.87	1	A
Aroclor 1260	22.4	JP	ug/kg	35.4	6.54	1	B
Aroclor 1262	ND		ug/kg	35.4	4.50	1	A
Aroclor 1268	ND		ug/kg	35.4	3.67	1	A
PCBs, Total	22.4	J	ug/kg	35.4	3.14	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:28
 Analyst: HT
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.7	3.17	1	A
Aroclor 1221	ND		ug/kg	35.7	3.58	1	A
Aroclor 1232	ND		ug/kg	35.7	7.57	1	A
Aroclor 1242	ND		ug/kg	35.7	4.81	1	A
Aroclor 1248	ND		ug/kg	35.7	5.35	1	A
Aroclor 1254	ND		ug/kg	35.7	3.90	1	A
Aroclor 1260	ND		ug/kg	35.7	6.60	1	A
Aroclor 1262	ND		ug/kg	35.7	4.53	1	A
Aroclor 1268	ND		ug/kg	35.7	3.70	1	A
PCBs, Total	ND		ug/kg	35.7	3.17	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:41
 Analyst: HT
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.2	3.21	1	A
Aroclor 1221	ND		ug/kg	36.2	3.62	1	A
Aroclor 1232	ND		ug/kg	36.2	7.67	1	A
Aroclor 1242	ND		ug/kg	36.2	4.88	1	A
Aroclor 1248	ND		ug/kg	36.2	5.42	1	A
Aroclor 1254	ND		ug/kg	36.2	3.96	1	A
Aroclor 1260	ND		ug/kg	36.2	6.68	1	A
Aroclor 1262	ND		ug/kg	36.2	4.59	1	A
Aroclor 1268	ND		ug/kg	36.2	3.75	1	A
PCBs, Total	ND		ug/kg	36.2	3.21	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 14:54
 Analyst: HT
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.6	3.07	1	A
Aroclor 1221	ND		ug/kg	34.6	3.47	1	A
Aroclor 1232	ND		ug/kg	34.6	7.34	1	A
Aroclor 1242	ND		ug/kg	34.6	4.66	1	A
Aroclor 1248	ND		ug/kg	34.6	5.19	1	A
Aroclor 1254	ND		ug/kg	34.6	3.79	1	A
Aroclor 1260	ND		ug/kg	34.6	6.40	1	A
Aroclor 1262	ND		ug/kg	34.6	4.40	1	A
Aroclor 1268	ND		ug/kg	34.6	3.58	1	A
PCBs, Total	ND		ug/kg	34.6	3.07	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 15:07
 Analyst: HT
 Percent Solids: 70%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	46.8	4.16	1	A
Aroclor 1221	ND		ug/kg	46.8	4.69	1	A
Aroclor 1232	ND		ug/kg	46.8	9.93	1	A
Aroclor 1242	ND		ug/kg	46.8	6.31	1	A
Aroclor 1248	ND		ug/kg	46.8	7.02	1	A
Aroclor 1254	ND		ug/kg	46.8	5.12	1	A
Aroclor 1260	ND		ug/kg	46.8	8.65	1	A
Aroclor 1262	ND		ug/kg	46.8	5.95	1	A
Aroclor 1268	ND		ug/kg	46.8	4.85	1	A
PCBs, Total	ND		ug/kg	46.8	4.16	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	100		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 13:50
 Analyst: WR
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	3.23	1	A
Aroclor 1221	ND		ug/kg	36.4	3.65	1	A
Aroclor 1232	ND		ug/kg	36.4	7.72	1	A
Aroclor 1242	ND		ug/kg	36.4	4.91	1	A
Aroclor 1248	ND		ug/kg	36.4	5.46	1	A
Aroclor 1254	6.03	J	ug/kg	36.4	3.98	1	A
Aroclor 1260	12.0	J	ug/kg	36.4	6.73	1	B
Aroclor 1262	ND		ug/kg	36.4	4.62	1	A
Aroclor 1268	ND		ug/kg	36.4	3.77	1	A
PCBs, Total	18.0	J	ug/kg	36.4	3.23	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	108		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 15:20
 Analyst: HT
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 06:08
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/27/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.3	3.40	1	A
Aroclor 1221	ND		ug/kg	38.3	3.84	1	A
Aroclor 1232	ND		ug/kg	38.3	8.13	1	A
Aroclor 1242	ND		ug/kg	38.3	5.17	1	A
Aroclor 1248	ND		ug/kg	38.3	5.75	1	A
Aroclor 1254	ND		ug/kg	38.3	4.20	1	A
Aroclor 1260	ND		ug/kg	38.3	7.09	1	A
Aroclor 1262	ND		ug/kg	38.3	4.87	1	A
Aroclor 1268	ND		ug/kg	38.3	3.97	1	A
PCBs, Total	ND		ug/kg	38.3	3.40	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 12/30/18 17:01
Analyst: AWS

Extraction Method: EPA 3546
Extraction Date: 12/27/18 06:08
Cleanup Method: EPA 3665A
Cleanup Date: 12/27/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-11 Batch: WG1192973-1						
Aroclor 1016	ND		ug/kg	32.5	2.88	A
Aroclor 1221	ND		ug/kg	32.5	3.25	A
Aroclor 1232	ND		ug/kg	32.5	6.88	A
Aroclor 1242	ND		ug/kg	32.5	4.38	A
Aroclor 1248	ND		ug/kg	32.5	4.87	A
Aroclor 1254	ND		ug/kg	32.5	3.55	A
Aroclor 1260	ND		ug/kg	32.5	6.00	A
Aroclor 1262	ND		ug/kg	32.5	4.12	A
Aroclor 1268	ND		ug/kg	32.5	3.36	A
PCBs, Total	ND		ug/kg	32.5	2.88	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	71		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1192973-2 WG1192973-3									
Aroclor 1016	75		79		40-140	5		50	A
Aroclor 1260	69		71		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		79		30-150	A
Decachlorobiphenyl	71		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		83		30-150	B
Decachlorobiphenyl	75		76		30-150	B

PESTICIDES

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 20:04
 Analyst: SL
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.68	0.330	1	A
Lindane	ND		ug/kg	0.701	0.313	1	A
Alpha-BHC	ND		ug/kg	0.701	0.199	1	A
Beta-BHC	ND		ug/kg	1.68	0.638	1	A
Heptachlor	ND		ug/kg	0.841	0.377	1	A
Aldrin	ND		ug/kg	1.68	0.592	1	A
Heptachlor epoxide	ND		ug/kg	3.16	0.947	1	A
Endrin	ND		ug/kg	0.701	0.287	1	A
Endrin aldehyde	ND		ug/kg	2.10	0.736	1	A
Endrin ketone	ND		ug/kg	1.68	0.433	1	A
Dieldrin	ND		ug/kg	1.05	0.526	1	A
4,4'-DDE	ND		ug/kg	1.68	0.389	1	A
4,4'-DDD	ND		ug/kg	1.68	0.600	1	A
4,4'-DDT	ND		ug/kg	3.16	1.35	1	A
Endosulfan I	ND		ug/kg	1.68	0.398	1	A
Endosulfan II	1.02	JIP	ug/kg	1.68	0.562	1	A
Endosulfan sulfate	ND		ug/kg	0.701	0.334	1	A
Methoxychlor	ND		ug/kg	3.16	0.982	1	A
Toxaphene	ND		ug/kg	31.6	8.84	1	A
cis-Chlordane	ND		ug/kg	2.10	0.586	1	A
trans-Chlordane	0.657	JIP	ug/kg	2.10	0.555	1	A
Chlordane	ND		ug/kg	13.7	5.57	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-01

Date Collected: 12/26/18 09:45

Client ID: RB03_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	B
Decachlorobiphenyl	87		30-150	B
2,4,5,6-Tetrachloro-m-xylene	103		30-150	A
Decachlorobiphenyl	111		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
 Client ID: RB03_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 22:06
 Analyst: DGM
 Percent Solids: 94%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	175	11.0	1	A
2,4,5-T	ND		ug/kg	175	5.42	1	A
2,4,5-TP (Silvex)	ND		ug/kg	175	4.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	127		30-150	A
DCAA	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
 Client ID: RB03_2-3
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 22:44
 Analyst: DGM
 Percent Solids: 90%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.67	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	118		30-150	A
DCAA	84		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02 D
Client ID: RB03_2-3
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 12/30/18 20:17
Analyst: SL
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 12/27/18 13:10
Cleanup Method: EPA 3620B
Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	17.4	3.40	10	A
Lindane	ND		ug/kg	7.23	3.23	10	A
Alpha-BHC	ND		ug/kg	7.23	2.05	10	A
Beta-BHC	ND		ug/kg	17.4	6.58	10	A
Heptachlor	ND		ug/kg	8.68	3.89	10	A
Aldrin	ND		ug/kg	17.4	6.11	10	A
Heptachlor epoxide	ND		ug/kg	32.6	9.77	10	A
Endrin	ND		ug/kg	7.23	2.97	10	A
Endrin aldehyde	ND		ug/kg	21.7	7.60	10	A
Endrin ketone	ND		ug/kg	17.4	4.47	10	A
Dieldrin	ND		ug/kg	10.8	5.42	10	A
4,4'-DDE	ND		ug/kg	17.4	4.02	10	A
4,4'-DDD	ND		ug/kg	17.4	6.19	10	A
4,4'-DDT	ND		ug/kg	32.6	14.0	10	A
Endosulfan I	ND		ug/kg	17.4	4.10	10	A
Endosulfan II	ND		ug/kg	17.4	5.80	10	A
Endosulfan sulfate	ND		ug/kg	7.23	3.44	10	B
Methoxychlor	ND		ug/kg	32.6	10.1	10	A
Toxaphene	ND		ug/kg	326	91.2	10	A
cis-Chlordane	ND		ug/kg	21.7	6.05	10	A
trans-Chlordane	ND		ug/kg	21.7	5.73	10	A
Chlordane	ND		ug/kg	141	57.5	10	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-02 D

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	33		30-150	B
Decachlorobiphenyl	81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	35		30-150	A
Decachlorobiphenyl	37		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 23:03
 Analyst: DGM
 Percent Solids: 82%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	203	12.8	1	A
2,4,5-T	ND		ug/kg	203	6.30	1	A
2,4,5-TP (Silvex)	ND		ug/kg	203	5.40	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	199	Q	30-150	A
DCAA	130		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03 D
 Client ID: RB03_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 09:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 20:14
 Analyst: SL
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	94.3	18.5	50	A
Lindane	ND		ug/kg	39.3	17.6	50	A
Alpha-BHC	ND		ug/kg	39.3	11.2	50	A
Beta-BHC	ND		ug/kg	94.3	35.7	50	A
Heptachlor	ND		ug/kg	47.1	21.1	50	A
Aldrin	ND		ug/kg	94.3	33.2	50	A
Heptachlor epoxide	ND		ug/kg	177	53.0	50	A
Endrin	ND		ug/kg	39.3	16.1	50	A
Endrin aldehyde	ND		ug/kg	118	41.2	50	A
Endrin ketone	ND		ug/kg	94.3	24.3	50	A
Dieldrin	ND		ug/kg	58.9	29.5	50	A
4,4'-DDE	ND		ug/kg	94.3	21.8	50	A
4,4'-DDD	ND		ug/kg	94.3	33.6	50	A
4,4'-DDT	ND	IP	ug/kg	177	75.8	50	A
Endosulfan I	ND		ug/kg	94.3	22.3	50	A
Endosulfan II	ND		ug/kg	94.3	31.5	50	A
Endosulfan sulfate	ND		ug/kg	39.3	18.7	50	A
Methoxychlor	ND		ug/kg	177	55.0	50	A
Toxaphene	ND		ug/kg	1770	495.	50	A
cis-Chlordane	ND		ug/kg	118	32.8	50	A
trans-Chlordane	ND		ug/kg	118	31.1	50	A
Chlordane	ND		ug/kg	766	312.	50	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-03 D

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 20:42
 Analyst: SL
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.341	1	A
Lindane	ND		ug/kg	0.726	0.325	1	A
Alpha-BHC	ND		ug/kg	0.726	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.661	1	A
Heptachlor	ND		ug/kg	0.872	0.391	1	A
Aldrin	ND		ug/kg	1.74	0.614	1	A
Heptachlor epoxide	ND		ug/kg	3.27	0.981	1	A
Endrin	ND		ug/kg	0.726	0.298	1	A
Endrin aldehyde	ND		ug/kg	2.18	0.763	1	A
Endrin ketone	ND		ug/kg	1.74	0.449	1	A
Dieldrin	ND		ug/kg	1.09	0.545	1	A
4,4'-DDE	ND		ug/kg	1.74	0.403	1	A
4,4'-DDD	ND		ug/kg	1.74	0.622	1	A
4,4'-DDT	ND		ug/kg	3.27	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.412	1	A
Endosulfan II	6.87	IP	ug/kg	1.74	0.583	1	A
Endosulfan sulfate	ND		ug/kg	0.726	0.346	1	A
Methoxychlor	ND		ug/kg	3.27	1.02	1	A
Toxaphene	ND		ug/kg	32.7	9.15	1	A
cis-Chlordane	ND		ug/kg	2.18	0.607	1	A
trans-Chlordane	0.956	JIP	ug/kg	2.18	0.575	1	A
Chlordane	ND		ug/kg	14.2	5.78	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-04

Date Collected: 12/26/18 11:55

Client ID: RB12_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	99		30-150	B
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	121		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
 Client ID: RB12_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 23:22
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.67	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	110		30-150	A
DCAA	94		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 23:41
 Analyst: DGM
 Percent Solids: 93%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	177	11.2	1	A
2,4,5-T	ND		ug/kg	177	5.50	1	A
2,4,5-TP (Silvex)	ND		ug/kg	177	4.72	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	97		30-150	A
DCAA	94		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05 D
 Client ID: RB12_8-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 20:27
 Analyst: SL
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	34.3	6.72	20	A
Lindane	ND		ug/kg	14.3	6.40	20	A
Alpha-BHC	ND		ug/kg	14.3	4.06	20	A
Beta-BHC	ND		ug/kg	34.3	13.0	20	A
Heptachlor	ND		ug/kg	17.2	7.70	20	A
Aldrin	ND		ug/kg	34.3	12.1	20	A
Heptachlor epoxide	ND		ug/kg	64.4	19.3	20	A
Endrin	ND		ug/kg	14.3	5.86	20	A
Endrin aldehyde	ND		ug/kg	42.9	15.0	20	A
Endrin ketone	ND		ug/kg	34.3	8.84	20	A
Dieldrin	16.9	J	ug/kg	21.5	10.7	20	B
4,4'-DDE	ND		ug/kg	34.3	7.94	20	A
4,4'-DDD	ND		ug/kg	34.3	12.2	20	A
4,4'-DDT	ND		ug/kg	64.4	27.6	20	A
Endosulfan I	ND		ug/kg	34.3	8.11	20	A
Endosulfan II	ND		ug/kg	34.3	11.5	20	A
Endosulfan sulfate	ND		ug/kg	14.3	6.81	20	A
Methoxychlor	ND		ug/kg	64.4	20.0	20	A
Toxaphene	ND		ug/kg	644	180.	20	A
cis-Chlordane	ND		ug/kg	42.9	12.0	20	A
trans-Chlordane	ND		ug/kg	42.9	11.3	20	A
Chlordane	ND		ug/kg	279	114.	20	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-05 D

Date Collected: 12/26/18 12:00

Client ID: RB12_8-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 21:08
 Analyst: SL
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.340	1	A
Lindane	ND		ug/kg	0.724	0.324	1	A
Alpha-BHC	ND		ug/kg	0.724	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.659	1	A
Heptachlor	ND		ug/kg	0.869	0.390	1	A
Aldrin	ND		ug/kg	1.74	0.612	1	A
Heptachlor epoxide	ND	IP	ug/kg	3.26	0.978	1	B
Endrin	1.60	P	ug/kg	0.724	0.297	1	A
Endrin aldehyde	ND		ug/kg	2.17	0.760	1	A
Endrin ketone	ND		ug/kg	1.74	0.448	1	A
Dieldrin	ND		ug/kg	1.09	0.543	1	A
4,4'-DDE	ND		ug/kg	1.74	0.402	1	A
4,4'-DDD	ND		ug/kg	1.74	0.620	1	A
4,4'-DDT	ND		ug/kg	3.26	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.411	1	A
Endosulfan II	ND		ug/kg	1.74	0.581	1	A
Endosulfan sulfate	ND		ug/kg	0.724	0.345	1	A
Methoxychlor	ND		ug/kg	3.26	1.01	1	A
Toxaphene	ND		ug/kg	32.6	9.12	1	A
cis-Chlordane	ND		ug/kg	2.17	0.605	1	A
trans-Chlordane	0.748	JIP	ug/kg	2.17	0.574	1	A
Chlordane	ND		ug/kg	14.1	5.76	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-06

Date Collected: 12/26/18 12:05

Client ID: RB12_9-10

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	108		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	99		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
 Client ID: RB12_9-10
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 00:00
 Analyst: DGM
 Percent Solids: 88%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.71	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.90	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	125		30-150	A
DCAA	93		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 21:20
 Analyst: SL
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.75	0.342	1	A
Lindane	ND		ug/kg	0.729	0.326	1	A
Alpha-BHC	ND		ug/kg	0.729	0.207	1	A
Beta-BHC	ND		ug/kg	1.75	0.663	1	A
Heptachlor	ND		ug/kg	0.874	0.392	1	A
Aldrin	ND		ug/kg	1.75	0.616	1	A
Heptachlor epoxide	ND		ug/kg	3.28	0.984	1	A
Endrin	ND		ug/kg	0.729	0.299	1	A
Endrin aldehyde	ND		ug/kg	2.19	0.765	1	A
Endrin ketone	ND		ug/kg	1.75	0.450	1	A
Dieldrin	ND		ug/kg	1.09	0.546	1	A
4,4'-DDE	ND		ug/kg	1.75	0.404	1	A
4,4'-DDD	ND		ug/kg	1.75	0.624	1	A
4,4'-DDT	ND		ug/kg	3.28	1.41	1	A
Endosulfan I	ND		ug/kg	1.75	0.413	1	A
Endosulfan II	ND		ug/kg	1.75	0.584	1	A
Endosulfan sulfate	ND		ug/kg	0.729	0.347	1	A
Methoxychlor	ND		ug/kg	3.28	1.02	1	A
Toxaphene	ND		ug/kg	32.8	9.18	1	A
cis-Chlordane	ND		ug/kg	2.19	0.609	1	A
trans-Chlordane	ND		ug/kg	2.19	0.577	1	A
Chlordane	ND		ug/kg	14.2	5.79	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-07

Date Collected: 12/26/18 12:10

Client ID: RB12_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	98		30-150	B
2,4,5,6-Tetrachloro-m-xylene	322	Q	30-150	A
Decachlorobiphenyl	109		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
 Client ID: RB12_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 00:18
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	180	11.3	1	A
2,4,5-T	ND		ug/kg	180	5.57	1	A
2,4,5-TP (Silvex)	ND		ug/kg	180	4.78	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	119		30-150	A
DCAA	95		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 21:33
 Analyst: SL
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.65	0.324	1	A
Lindane	ND		ug/kg	0.689	0.308	1	A
Alpha-BHC	ND		ug/kg	0.689	0.196	1	A
Beta-BHC	ND		ug/kg	1.65	0.627	1	A
Heptachlor	ND		ug/kg	0.826	0.370	1	A
Aldrin	ND		ug/kg	1.65	0.582	1	A
Heptachlor epoxide	ND		ug/kg	3.10	0.930	1	A
Endrin	ND		ug/kg	0.689	0.282	1	A
Endrin aldehyde	ND		ug/kg	2.07	0.723	1	A
Endrin ketone	ND		ug/kg	1.65	0.426	1	A
Dieldrin	ND		ug/kg	1.03	0.516	1	A
4,4'-DDE	ND		ug/kg	1.65	0.382	1	A
4,4'-DDD	ND		ug/kg	1.65	0.590	1	A
4,4'-DDT	ND		ug/kg	3.10	1.33	1	A
Endosulfan I	ND		ug/kg	1.65	0.390	1	A
Endosulfan II	ND		ug/kg	1.65	0.552	1	A
Endosulfan sulfate	ND		ug/kg	0.689	0.328	1	A
Methoxychlor	ND		ug/kg	3.10	0.964	1	A
Toxaphene	ND		ug/kg	31.0	8.68	1	A
cis-Chlordane	ND		ug/kg	2.07	0.576	1	A
trans-Chlordane	ND		ug/kg	2.07	0.545	1	A
Chlordane	ND		ug/kg	13.4	5.47	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-08

Date Collected: 12/26/18 13:25

Client ID: RB02_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	79		30-150	B
2,4,5,6-Tetrachloro-m-xylene	117		30-150	A
Decachlorobiphenyl	87		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
 Client ID: RB02_0-2
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 00:37
 Analyst: DGM
 Percent Solids: 94%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	176	11.1	1	A
2,4,5-T	ND		ug/kg	176	5.46	1	A
2,4,5-TP (Silvex)	ND		ug/kg	176	4.69	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	96		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/03/19 20:40
 Analyst: SL
 Percent Solids: 70%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	10.9	2.14	5	A
Lindane	ND		ug/kg	4.56	2.04	5	A
Alpha-BHC	ND		ug/kg	4.56	1.29	5	A
Beta-BHC	ND		ug/kg	10.9	4.15	5	A
Heptachlor	ND		ug/kg	5.47	2.45	5	A
Aldrin	ND		ug/kg	10.9	3.85	5	A
Heptachlor epoxide	ND		ug/kg	20.5	6.15	5	A
Endrin	ND		ug/kg	4.56	1.87	5	A
Endrin aldehyde	ND		ug/kg	13.7	4.78	5	A
Endrin ketone	ND		ug/kg	10.9	2.82	5	A
Dieldrin	ND		ug/kg	6.84	3.42	5	A
4,4'-DDE	ND		ug/kg	10.9	2.53	5	A
4,4'-DDD	ND		ug/kg	10.9	3.90	5	A
4,4'-DDT	ND		ug/kg	20.5	8.79	5	A
Endosulfan I	ND		ug/kg	10.9	2.58	5	A
Endosulfan II	ND		ug/kg	10.9	3.65	5	A
Endosulfan sulfate	ND		ug/kg	4.56	2.17	5	A
Methoxychlor	ND		ug/kg	20.5	6.38	5	A
Toxaphene	ND		ug/kg	205	57.4	5	A
cis-Chlordane	ND		ug/kg	13.7	3.81	5	A
trans-Chlordane	ND		ug/kg	13.7	3.61	5	A
Chlordane	ND		ug/kg	88.9	36.2	5	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-09 D

Date Collected: 12/26/18 13:30

Client ID: RB02_7-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	100		30-150	B
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	132		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09 D
 Client ID: RB02_7-9
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:30
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/03/19 13:50
 Analyst: DGM
 Percent Solids: 70%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	4720	297.	20	B
2,4,5-T	ND		ug/kg	4720	146.	20	B
2,4,5-TP (Silvex)	ND		ug/kg	4720	125.	20	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	0	Q	30-150	A
DCAA	0	Q	30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 10:57
 Analyst: BM
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.72	0.337	1	A
Lindane	ND		ug/kg	0.716	0.320	1	A
Alpha-BHC	ND		ug/kg	0.716	0.203	1	A
Beta-BHC	ND		ug/kg	1.72	0.652	1	A
Heptachlor	ND		ug/kg	0.860	0.385	1	A
Aldrin	ND		ug/kg	1.72	0.605	1	A
Heptachlor epoxide	ND		ug/kg	3.22	0.967	1	A
Endrin	ND		ug/kg	0.716	0.294	1	A
Endrin aldehyde	ND		ug/kg	2.15	0.752	1	A
Endrin ketone	ND		ug/kg	1.72	0.443	1	A
Dieldrin	ND		ug/kg	1.07	0.537	1	A
4,4'-DDE	ND		ug/kg	1.72	0.398	1	A
4,4'-DDD	ND		ug/kg	1.72	0.613	1	A
4,4'-DDT	ND		ug/kg	3.22	1.38	1	A
Endosulfan I	ND		ug/kg	1.72	0.406	1	A
Endosulfan II	2.05	IP	ug/kg	1.72	0.575	1	A
Endosulfan sulfate	ND		ug/kg	0.716	0.341	1	A
Methoxychlor	ND		ug/kg	3.22	1.00	1	A
Toxaphene	ND		ug/kg	32.2	9.03	1	A
cis-Chlordane	ND		ug/kg	2.15	0.599	1	A
trans-Chlordane	ND		ug/kg	2.15	0.567	1	A
Chlordane	ND		ug/kg	14.0	5.70	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-10

Date Collected: 12/26/18 13:35

Client ID: RB02_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	93		30-150	B
2,4,5,6-Tetrachloro-m-xylene	254	Q	30-150	A
Decachlorobiphenyl	113		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
 Client ID: RB02_10-12
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 01:15
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	180	11.3	1	A
2,4,5-T	ND		ug/kg	180	5.57	1	A
2,4,5-TP (Silvex)	ND		ug/kg	180	4.78	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	98		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 11:10
 Analyst: BM
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.85	0.362	1	A
Lindane	ND		ug/kg	0.769	0.344	1	A
Alpha-BHC	ND		ug/kg	0.769	0.218	1	A
Beta-BHC	ND		ug/kg	1.85	0.700	1	A
Heptachlor	ND		ug/kg	0.923	0.414	1	A
Aldrin	ND		ug/kg	1.85	0.650	1	A
Heptachlor epoxide	ND		ug/kg	3.46	1.04	1	A
Endrin	ND		ug/kg	0.769	0.315	1	A
Endrin aldehyde	ND		ug/kg	2.31	0.808	1	A
Endrin ketone	ND		ug/kg	1.85	0.475	1	A
Dieldrin	ND		ug/kg	1.15	0.577	1	A
4,4'-DDE	ND		ug/kg	1.85	0.427	1	A
4,4'-DDD	ND		ug/kg	1.85	0.658	1	A
4,4'-DDT	ND		ug/kg	3.46	1.48	1	A
Endosulfan I	ND		ug/kg	1.85	0.436	1	A
Endosulfan II	ND		ug/kg	1.85	0.617	1	A
Endosulfan sulfate	ND		ug/kg	0.769	0.366	1	A
Methoxychlor	ND		ug/kg	3.46	1.08	1	A
Toxaphene	ND		ug/kg	34.6	9.69	1	A
cis-Chlordane	ND		ug/kg	2.31	0.643	1	A
trans-Chlordane	ND		ug/kg	2.31	0.609	1	A
Chlordane	ND		ug/kg	15.0	6.12	1	A

Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-11

Date Collected: 12/26/18 13:40

Client ID: RB02_13-15

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	3520	Q	30-150	A
Decachlorobiphenyl	68		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
 Client ID: RB02_13-15
 Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
 Date Received: 12/26/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/01/19 01:34
 Analyst: DGM
 Percent Solids: 82%
 Methylation Date: 12/28/18 08:43

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	202	12.7	1	A
2,4,5-T	ND		ug/kg	202	6.26	1	A
2,4,5-TP (Silvex)	ND		ug/kg	202	5.37	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	135		30-150	A
DCAA	100		30-150	B

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 12/28/18 11:37
 Analyst: JB

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-11 Batch: WG1193145-1						
Delta-BHC	ND		ug/kg	1.58	0.310	A
Lindane	ND		ug/kg	0.659	0.295	A
Alpha-BHC	ND		ug/kg	0.659	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.600	A
Heptachlor	ND		ug/kg	0.791	0.355	A
Aldrin	ND		ug/kg	1.58	0.557	A
Heptachlor epoxide	ND		ug/kg	2.97	0.890	A
Endrin	ND		ug/kg	0.659	0.270	A
Endrin aldehyde	ND		ug/kg	1.98	0.692	A
Endrin ketone	ND		ug/kg	1.58	0.407	A
Dieldrin	ND		ug/kg	0.989	0.494	A
4,4'-DDE	ND		ug/kg	1.58	0.366	A
4,4'-DDD	ND		ug/kg	1.58	0.564	A
4,4'-DDT	ND		ug/kg	2.97	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.374	A
Endosulfan II	ND		ug/kg	1.58	0.529	A
Endosulfan sulfate	ND		ug/kg	0.659	0.314	A
Methoxychlor	ND		ug/kg	2.97	0.923	A
Toxaphene	ND		ug/kg	29.7	8.30	A
cis-Chlordane	ND		ug/kg	1.98	0.551	A
trans-Chlordane	ND		ug/kg	1.98	0.522	A
Chlordane	ND		ug/kg	12.8	5.24	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 12/28/18 11:37
 Analyst: JB

Extraction Method: EPA 3546
 Extraction Date: 12/27/18 13:10
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/28/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-11 Batch: WG1193145-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	111		30-150	A

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 12/31/18 06:23
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 16:06

Methylation Date: 12/28/18 08:43

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-11 Batch: WG1193211-1						
2,4-D	ND		ug/kg	164	10.3	A
2,4,5-T	ND		ug/kg	164	5.07	A
2,4,5-TP (Silvex)	ND		ug/kg	164	4.35	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	89		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1193145-2 WG1193145-3									
Delta-BHC	100		108		30-150	8		30	A
Lindane	99		106		30-150	7		30	A
Alpha-BHC	107		106		30-150	1		30	A
Beta-BHC	88		95		30-150	8		30	A
Heptachlor	96		105		30-150	9		30	A
Aldrin	92		102		30-150	10		30	A
Heptachlor epoxide	103		114		30-150	10		30	A
Endrin	106		115		30-150	8		30	A
Endrin aldehyde	86		93		30-150	8		30	A
Endrin ketone	120		121		30-150	1		30	A
Dieldrin	111		121		30-150	9		30	A
4,4'-DDE	92		98		30-150	6		30	A
4,4'-DDD	103		116		30-150	12		30	A
4,4'-DDT	101		117		30-150	15		30	A
Endosulfan I	91		98		30-150	7		30	A
Endosulfan II	103		113		30-150	9		30	A
Endosulfan sulfate	98		97		30-150	1		30	A
Methoxychlor	104		107		30-150	3		30	A
cis-Chlordane	68		73		30-150	7		30	A
trans-Chlordane	76		70		30-150	8		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1193145-2 WG1193145-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	83		87		30-150	B
Decachlorobiphenyl	88		91		30-150	B
2,4,5,6-Tetrachloro-m-xylene	89		92		30-150	A
Decachlorobiphenyl	114		116		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1193211-2 WG1193211-3									
2,4-D	116		131		30-150	12		30	A
2,4,5-T	95		94		30-150	1		30	A
2,4,5-TP (Silvex)	82		82		30-150	0		30	A

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria	Column
DCAA	97		100		30-150	A
DCAA	100		106		30-150	B

METALS

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01

Date Collected: 12/26/18 09:45

Client ID: RB03_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5000		mg/kg	8.11	2.19	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Antimony, Total	8.09		mg/kg	4.05	0.308	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Arsenic, Total	17.2		mg/kg	0.811	0.169	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Barium, Total	178		mg/kg	0.811	0.141	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Beryllium, Total	0.260	J	mg/kg	0.405	0.027	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Cadmium, Total	7.40		mg/kg	0.811	0.080	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Calcium, Total	16300		mg/kg	8.11	2.84	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Chromium, Total	18.0		mg/kg	0.811	0.078	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Cobalt, Total	7.62		mg/kg	1.62	0.135	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Copper, Total	270		mg/kg	0.811	0.209	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Iron, Total	34000		mg/kg	4.05	0.732	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Lead, Total	621		mg/kg	4.05	0.217	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Magnesium, Total	2650		mg/kg	8.11	1.25	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Manganese, Total	229		mg/kg	0.811	0.129	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Mercury, Total	1.32		mg/kg	0.067	0.014	1	12/28/18 06:00	01/03/19 21:02	EPA 7471B	1,7471B	EA
Nickel, Total	19.2		mg/kg	2.03	0.196	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Potassium, Total	888		mg/kg	203	11.7	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Selenium, Total	2.40		mg/kg	1.62	0.209	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Silver, Total	35.7		mg/kg	0.811	0.230	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Sodium, Total	322		mg/kg	162	2.55	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.62	0.255	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Vanadium, Total	23.4		mg/kg	0.811	0.165	2	12/27/18 20:00	01/03/19 01:02	EPA 3050B	1,6010D	AB
Zinc, Total	3040		mg/kg	40.5	2.38	20	12/27/18 20:00	01/03/19 03:58	EPA 3050B	1,6010D	AB

General Chemistry - Mansfield Lab

Chromium, Trivalent	18	J	mg/kg	0.85	0.85	1		01/03/19 01:02	NA	107,-	
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Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02

Date Collected: 12/26/18 09:50

Client ID: RB03_2-3

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3840		mg/kg	8.73	2.36	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Antimony, Total	1.88	J	mg/kg	4.36	0.332	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Arsenic, Total	7.86		mg/kg	0.873	0.182	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Barium, Total	137		mg/kg	0.873	0.152	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Beryllium, Total	0.384	J	mg/kg	0.436	0.029	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.873	0.086	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Calcium, Total	19400		mg/kg	8.73	3.06	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Chromium, Total	7.80		mg/kg	0.873	0.084	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Cobalt, Total	5.49		mg/kg	1.75	0.145	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Copper, Total	150		mg/kg	0.873	0.225	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Iron, Total	10800		mg/kg	4.36	0.788	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Lead, Total	108		mg/kg	4.36	0.234	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Magnesium, Total	5700		mg/kg	8.73	1.34	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Manganese, Total	63.2		mg/kg	0.873	0.139	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Mercury, Total	1.83		mg/kg	0.070	0.015	1	12/28/18 06:00	01/03/19 21:04	EPA 7471B	1,7471B	EA
Nickel, Total	25.6		mg/kg	2.18	0.211	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Potassium, Total	440		mg/kg	218	12.6	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Selenium, Total	0.864	J	mg/kg	1.75	0.225	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Silver, Total	9.66		mg/kg	0.873	0.247	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Sodium, Total	260		mg/kg	175	2.75	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.75	0.275	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Vanadium, Total	17.4		mg/kg	0.873	0.177	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
Zinc, Total	277		mg/kg	4.36	0.256	2	12/27/18 20:00	01/03/19 01:06	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.8		mg/kg	0.89	0.89	1		01/03/19 01:06	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-03

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5830		mg/kg	9.52	2.57	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Antimony, Total	0.790	J	mg/kg	4.76	0.362	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Arsenic, Total	2.94		mg/kg	0.952	0.198	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Barium, Total	56.9		mg/kg	0.952	0.166	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Beryllium, Total	0.190	J	mg/kg	0.476	0.031	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.952	0.093	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Calcium, Total	4160		mg/kg	9.52	3.33	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Chromium, Total	13.9		mg/kg	0.952	0.091	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Cobalt, Total	7.86		mg/kg	1.90	0.158	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Copper, Total	126		mg/kg	0.952	0.246	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Iron, Total	16200		mg/kg	4.76	0.859	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Lead, Total	51.8		mg/kg	4.76	0.255	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Magnesium, Total	2660		mg/kg	9.52	1.46	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Manganese, Total	112		mg/kg	0.952	0.151	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Mercury, Total	0.226		mg/kg	0.077	0.016	1	12/28/18 06:00	01/03/19 21:06	EPA 7471B	1,7471B	EA
Nickel, Total	14.9		mg/kg	2.38	0.230	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Potassium, Total	2060		mg/kg	238	13.7	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Selenium, Total	0.523	J	mg/kg	1.90	0.246	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Silver, Total	0.580	J	mg/kg	0.952	0.269	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Sodium, Total	197		mg/kg	190	3.00	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.90	0.300	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Vanadium, Total	21.6		mg/kg	0.952	0.193	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
Zinc, Total	430		mg/kg	4.76	0.279	2	12/27/18 20:00	01/03/19 01:10	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	0.98	0.98	1		01/03/19 01:10	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04

Date Collected: 12/26/18 11:55

Client ID: RB12_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3080		mg/kg	8.67	2.34	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Antimony, Total	0.988	J	mg/kg	4.33	0.329	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Arsenic, Total	6.86		mg/kg	0.867	0.180	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Barium, Total	92.6		mg/kg	0.867	0.151	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Beryllium, Total	0.269	J	mg/kg	0.433	0.029	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.867	0.085	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Calcium, Total	28600		mg/kg	8.67	3.03	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Chromium, Total	7.26		mg/kg	0.867	0.083	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Cobalt, Total	5.44		mg/kg	1.73	0.144	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Copper, Total	56.0		mg/kg	0.867	0.224	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Iron, Total	7630		mg/kg	4.33	0.782	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Lead, Total	162		mg/kg	4.33	0.232	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Magnesium, Total	1240		mg/kg	8.67	1.33	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Manganese, Total	72.8		mg/kg	0.867	0.138	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Mercury, Total	0.446		mg/kg	0.069	0.015	1	12/28/18 06:00	01/03/19 21:08	EPA 7471B	1,7471B	EA
Nickel, Total	18.9		mg/kg	2.17	0.210	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Potassium, Total	1260		mg/kg	217	12.5	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Selenium, Total	0.373	J	mg/kg	1.73	0.224	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Silver, Total	0.303	J	mg/kg	0.867	0.245	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Sodium, Total	643		mg/kg	173	2.73	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.73	0.273	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Vanadium, Total	17.7		mg/kg	0.867	0.176	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
Zinc, Total	95.8		mg/kg	4.33	0.254	2	12/27/18 20:00	01/03/19 01:15	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.3		mg/kg	0.88	0.88	1		01/03/19 01:15	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05

Date Collected: 12/26/18 12:00

Client ID: RB12_8-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8460		mg/kg	8.36	2.26	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.18	0.318	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Arsenic, Total	1.47		mg/kg	0.836	0.174	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Barium, Total	73.8		mg/kg	0.836	0.146	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Beryllium, Total	0.410	J	mg/kg	0.418	0.028	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.836	0.082	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Calcium, Total	11700		mg/kg	8.36	2.93	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Chromium, Total	18.7		mg/kg	0.836	0.080	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Cobalt, Total	11.7		mg/kg	1.67	0.139	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Copper, Total	24.2		mg/kg	0.836	0.216	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Iron, Total	18200		mg/kg	4.18	0.755	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Lead, Total	27.3		mg/kg	4.18	0.224	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Magnesium, Total	3040		mg/kg	8.36	1.29	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Manganese, Total	248		mg/kg	0.836	0.133	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Mercury, Total	0.161		mg/kg	0.068	0.014	1	12/28/18 06:00	01/03/19 21:10	EPA 7471B	1,7471B	EA
Nickel, Total	17.4		mg/kg	2.09	0.202	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Potassium, Total	3130		mg/kg	209	12.0	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.67	0.216	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.836	0.237	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Sodium, Total	55.5	J	mg/kg	167	2.63	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.67	0.263	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Vanadium, Total	26.4		mg/kg	0.836	0.170	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
Zinc, Total	52.8		mg/kg	4.18	0.245	2	12/27/18 20:00	01/03/19 01:19	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	19		mg/kg	0.86	0.86	1		01/03/19 01:19	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06

Date Collected: 12/26/18 12:05

Client ID: RB12_9-10

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8610		mg/kg	9.03	2.44	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.52	0.343	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Arsenic, Total	1.97		mg/kg	0.903	0.188	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Barium, Total	129		mg/kg	0.903	0.157	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Beryllium, Total	0.244	J	mg/kg	0.452	0.030	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.903	0.089	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Calcium, Total	4200		mg/kg	9.03	3.16	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Chromium, Total	19.8		mg/kg	0.903	0.087	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Cobalt, Total	13.4		mg/kg	1.81	0.150	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Copper, Total	42.3		mg/kg	0.903	0.233	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Iron, Total	17800		mg/kg	4.52	0.816	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Lead, Total	280		mg/kg	4.52	0.242	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Magnesium, Total	5290		mg/kg	9.03	1.39	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Manganese, Total	149		mg/kg	0.903	0.144	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Mercury, Total	0.220		mg/kg	0.072	0.015	1	12/28/18 06:00	01/03/19 21:12	EPA 7471B	1,7471B	EA
Nickel, Total	26.8		mg/kg	2.26	0.219	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Potassium, Total	6230		mg/kg	226	13.0	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Selenium, Total	0.596	J	mg/kg	1.81	0.233	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.903	0.256	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Sodium, Total	150	J	mg/kg	181	2.84	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.81	0.284	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Vanadium, Total	25.8		mg/kg	0.903	0.183	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
Zinc, Total	76.0		mg/kg	4.52	0.265	2	12/27/18 20:00	01/03/19 01:56	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	20		mg/kg	0.91	0.91	1		01/03/19 01:56	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07

Date Collected: 12/26/18 12:10

Client ID: RB12_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5040		mg/kg	8.47	2.29	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Antimony, Total	1.05	J	mg/kg	4.24	0.322	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Arsenic, Total	7.58		mg/kg	0.847	0.176	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Barium, Total	56.8		mg/kg	0.847	0.147	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Beryllium, Total	0.220	J	mg/kg	0.424	0.028	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.847	0.083	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Calcium, Total	22700		mg/kg	8.47	2.97	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Chromium, Total	11.0		mg/kg	0.847	0.081	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Cobalt, Total	5.78		mg/kg	1.69	0.141	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Copper, Total	52.4		mg/kg	0.847	0.219	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Iron, Total	9100		mg/kg	4.24	0.765	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Lead, Total	126		mg/kg	4.24	0.227	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Magnesium, Total	2260		mg/kg	8.47	1.30	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Manganese, Total	148		mg/kg	0.847	0.135	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Mercury, Total	0.725		mg/kg	0.070	0.015	1	12/28/18 06:00	01/03/19 21:18	EPA 7471B	1,7471B	EA
Nickel, Total	14.1		mg/kg	2.12	0.205	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Potassium, Total	1470		mg/kg	212	12.2	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Selenium, Total	0.492	J	mg/kg	1.69	0.219	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Silver, Total	0.830	J	mg/kg	0.847	0.240	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Sodium, Total	187		mg/kg	169	2.67	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.69	0.267	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Vanadium, Total	17.0		mg/kg	0.847	0.172	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
Zinc, Total	69.2		mg/kg	4.24	0.248	2	12/27/18 20:00	01/03/19 02:00	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.88	0.88	1		01/03/19 02:00	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08

Date Collected: 12/26/18 13:25

Client ID: RB02_0-2

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2920		mg/kg	8.01	2.16	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.00	0.304	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Arsenic, Total	10.3		mg/kg	0.801	0.167	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Barium, Total	53.4		mg/kg	0.801	0.139	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Beryllium, Total	0.112	J	mg/kg	0.400	0.026	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.801	0.079	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Calcium, Total	48200		mg/kg	8.01	2.80	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Chromium, Total	7.26		mg/kg	0.801	0.077	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Cobalt, Total	3.20		mg/kg	1.60	0.133	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Copper, Total	8.00		mg/kg	0.801	0.207	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Iron, Total	6460		mg/kg	4.00	0.723	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Lead, Total	80.8		mg/kg	4.00	0.215	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Magnesium, Total	5460		mg/kg	8.01	1.23	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Manganese, Total	93.2		mg/kg	0.801	0.127	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Mercury, Total	0.076		mg/kg	0.067	0.014	1	12/28/18 06:00	01/03/19 21:20	EPA 7471B	1,7471B	EA
Nickel, Total	6.16		mg/kg	2.00	0.194	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Potassium, Total	1060		mg/kg	200	11.5	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Selenium, Total	0.489	J	mg/kg	1.60	0.207	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.801	0.227	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Sodium, Total	238		mg/kg	160	2.52	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.60	0.252	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Vanadium, Total	9.12		mg/kg	0.801	0.163	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
Zinc, Total	39.7		mg/kg	4.00	0.235	2	12/27/18 20:00	01/03/19 02:05	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.3		mg/kg	0.86	0.86	1		01/03/19 02:05	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-09

Date Collected: 12/26/18 13:30

Client ID: RB02_7-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 70%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3560		mg/kg	11.0	2.96	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	5.49	0.417	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Arsenic, Total	6.20		mg/kg	1.10	0.228	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Barium, Total	52.8		mg/kg	1.10	0.191	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Beryllium, Total	0.209	J	mg/kg	0.549	0.036	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	1.10	0.108	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Calcium, Total	293000		mg/kg	110	38.4	20	12/27/18 20:00	01/03/19 03:50	EPA 3050B	1,6010D	AB
Chromium, Total	5.00		mg/kg	1.10	0.105	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Cobalt, Total	2.81		mg/kg	2.20	0.182	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Copper, Total	35.5		mg/kg	1.10	0.283	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Iron, Total	4600		mg/kg	5.49	0.992	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Lead, Total	95.4		mg/kg	5.49	0.294	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Magnesium, Total	716		mg/kg	11.0	1.69	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Manganese, Total	75.2		mg/kg	1.10	0.175	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.090	0.019	1	12/28/18 06:00	01/03/19 21:22	EPA 7471B	1,7471B	EA
Nickel, Total	6.91		mg/kg	2.74	0.266	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Potassium, Total	429		mg/kg	274	15.8	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Selenium, Total	0.516	J	mg/kg	2.20	0.283	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	1.10	0.311	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Sodium, Total	1090		mg/kg	220	3.46	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	2.20	0.346	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Vanadium, Total	6.37		mg/kg	1.10	0.223	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
Zinc, Total	82.7		mg/kg	5.49	0.322	2	12/27/18 20:00	01/03/19 02:09	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	5.0		mg/kg	1.1	1.1	1		01/03/19 02:09	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10

Date Collected: 12/26/18 13:35

Client ID: RB02_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4560		mg/kg	8.35	2.25	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Antimony, Total	0.359	J	mg/kg	4.17	0.317	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Arsenic, Total	2.58		mg/kg	0.835	0.174	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Barium, Total	75.8		mg/kg	0.835	0.145	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Beryllium, Total	0.217	J	mg/kg	0.417	0.028	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.835	0.082	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Calcium, Total	15900		mg/kg	8.35	2.92	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Chromium, Total	11.5		mg/kg	0.835	0.080	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Cobalt, Total	5.31		mg/kg	1.67	0.138	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Copper, Total	23.9		mg/kg	0.835	0.215	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Iron, Total	8740		mg/kg	4.17	0.754	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Lead, Total	198		mg/kg	4.17	0.224	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Magnesium, Total	2750		mg/kg	8.35	1.28	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Manganese, Total	124		mg/kg	0.835	0.133	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Mercury, Total	0.768		mg/kg	0.069	0.015	1	12/28/18 06:00	01/03/19 21:24	EPA 7471B	1,7471B	EA
Nickel, Total	12.6		mg/kg	2.09	0.202	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Potassium, Total	1090		mg/kg	209	12.0	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Selenium, Total	0.676	J	mg/kg	1.67	0.215	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.835	0.236	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Sodium, Total	192		mg/kg	167	2.63	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.67	0.263	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Vanadium, Total	13.7		mg/kg	0.835	0.169	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
Zinc, Total	95.7		mg/kg	4.17	0.244	2	12/27/18 20:00	01/03/19 02:13	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.88	0.88	1		01/03/19 02:13	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11

Date Collected: 12/26/18 13:40

Client ID: RB02_13-15

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6650		mg/kg	9.76	2.63	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Antimony, Total	0.410	J	mg/kg	4.88	0.371	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Arsenic, Total	4.21		mg/kg	0.976	0.203	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Barium, Total	74.0		mg/kg	0.976	0.170	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Beryllium, Total	0.400	J	mg/kg	0.488	0.032	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.976	0.096	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Calcium, Total	7550		mg/kg	9.76	3.41	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Chromium, Total	15.7		mg/kg	0.976	0.094	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Cobalt, Total	8.05		mg/kg	1.95	0.162	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Copper, Total	19.0		mg/kg	0.976	0.252	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Iron, Total	13700		mg/kg	4.88	0.881	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Lead, Total	388		mg/kg	4.88	0.261	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Magnesium, Total	3560		mg/kg	9.76	1.50	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Manganese, Total	265		mg/kg	0.976	0.155	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Mercury, Total	0.476		mg/kg	0.077	0.016	1	12/28/18 06:00	01/03/19 21:26	EPA 7471B	1,7471B	EA
Nickel, Total	14.3		mg/kg	2.44	0.236	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Potassium, Total	2320		mg/kg	244	14.0	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Selenium, Total	0.488	J	mg/kg	1.95	0.252	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.976	0.276	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Sodium, Total	264		mg/kg	195	3.07	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.95	0.307	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Vanadium, Total	21.6		mg/kg	0.976	0.198	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
Zinc, Total	67.8		mg/kg	4.88	0.286	2	12/27/18 20:00	01/03/19 02:17	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	16		mg/kg	0.98	0.98	1		01/03/19 02:17	NA	107,-	



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11 Batch: WG1193234-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Chromium, Total	0.144	J	mg/kg	0.400	0.038	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Iron, Total	1.26	J	mg/kg	2.00	0.361	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Manganese, Total	0.088	J	mg/kg	0.400	0.064	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Potassium, Total	ND		mg/kg	100	5.76	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Sodium, Total	1.42	J	mg/kg	80.0	1.26	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	12/27/18 20:00	01/02/19 22:50	1,6010D	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11 Batch: WG1193349-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	12/28/18 06:00	01/03/19 20:33	1,7471B	EA



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1193234-2 SRM Lot Number: D102-540								
Aluminum, Total	59		-		49-150	-		
Antimony, Total	120		-		1-199	-		
Arsenic, Total	92		-		83-117	-		
Barium, Total	86		-		83-118	-		
Beryllium, Total	84		-		83-116	-		
Cadmium, Total	92		-		83-118	-		
Calcium, Total	90		-		82-118	-		
Chromium, Total	83		-		83-117	-		
Cobalt, Total	90		-		84-116	-		
Copper, Total	86		-		84-116	-		
Iron, Total	75		-		61-139	-		
Lead, Total	86		-		82-118	-		
Magnesium, Total	87		-		76-124	-		
Manganese, Total	82		-		82-118	-		
Nickel, Total	88		-		83-117	-		
Potassium, Total	72		-		70-130	-		
Selenium, Total	92		-		79-121	-		
Silver, Total	80		-		80-120	-		
Sodium, Total	83		-		74-126	-		
Thallium, Total	95		-		81-119	-		
Vanadium, Total	83		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1193234-2 SRM Lot Number: D102-540					
Zinc, Total	87	-	81-118	-	
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1193349-2 SRM Lot Number: D102-540					
Mercury, Total	114	-	65-134	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-3 QC Sample: L1852947-01 Client ID: MS Sample												
Aluminum, Total	8310	182	10300	1090	Q	-	-		75-125	-		20
Antimony, Total	2.75J	45.5	25.4	56	Q	-	-		75-125	-		20
Arsenic, Total	19.5	10.9	32.7	121		-	-		75-125	-		20
Barium, Total	18.4	182	186	92		-	-		75-125	-		20
Beryllium, Total	0.835	4.55	5.00	91		-	-		75-125	-		20
Cadmium, Total	ND	4.64	2.56	55	Q	-	-		75-125	-		20
Calcium, Total	1420	911	2260	92		-	-		75-125	-		20
Chromium, Total	56.8	18.2	79.6	125		-	-		75-125	-		20
Cobalt, Total	4.62	45.5	45.2	89		-	-		75-125	-		20
Copper, Total	10.0	22.8	27.4	76		-	-		75-125	-		20
Iron, Total	53400	91.1	57800	4830	Q	-	-		75-125	-		20
Lead, Total	46.2	46.4	74.9	62	Q	-	-		75-125	-		20
Magnesium, Total	1470	911	2100	69	Q	-	-		75-125	-		20
Manganese, Total	60.4	45.5	96.7	80		-	-		75-125	-		20
Nickel, Total	9.91	45.5	48.8	85		-	-		75-125	-		20
Potassium, Total	2480	911	4520	224	Q	-	-		75-125	-		20
Selenium, Total	0.591J	10.9	10.1	92		-	-		75-125	-		20
Silver, Total	ND	27.3	21.5	79		-	-		75-125	-		20
Sodium, Total	33.9J	911	850	93		-	-		75-125	-		20
Thallium, Total	0.413J	10.9	9.52	87		-	-		75-125	-		20
Vanadium, Total	94.6	45.5	150	122		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-3 QC Sample: L1852947-01 Client ID: MS Sample									
Zinc, Total	169	45.5	147	0	Q	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193349-3 WG1193349-4 QC Sample: L1853088-01 Client ID: MS Sample									
Mercury, Total	13.2	0.148	11.7	0	Q	13.3	68	Q 80-120	13 20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-4 QC Sample: L1852947-01 Client ID: DUP Sample						
Aluminum, Total	8310	8570	mg/kg	3		20
Antimony, Total	2.75J	3.22J	mg/kg	NC		20
Arsenic, Total	19.5	21.6	mg/kg	10		20
Barium, Total	18.4	17.1	mg/kg	7		20
Beryllium, Total	0.835	0.891	mg/kg	6		20
Cadmium, Total	ND	ND	mg/kg	NC		20
Calcium, Total	1420	1330	mg/kg	7		20
Chromium, Total	56.8	59.4	mg/kg	4		20
Cobalt, Total	4.62	4.18	mg/kg	10		20
Copper, Total	10.0	8.96	mg/kg	11		20
Lead, Total	46.2	47.5	mg/kg	3		20
Magnesium, Total	1470	1350	mg/kg	9		20
Manganese, Total	60.4	61.0	mg/kg	1		20
Nickel, Total	9.91	9.44	mg/kg	5		20
Potassium, Total	2480	2490	mg/kg	0		20
Selenium, Total	0.591J	0.836J	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	33.9J	31.0J	mg/kg	NC		20
Thallium, Total	0.413J	0.340J	mg/kg	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-4 QC Sample: L1852947-01 Client ID: DUP Sample					
Vanadium, Total	94.6	95.1	mg/kg	1	20
Zinc, Total	169	224	mg/kg	28	20
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1193234-4 QC Sample: L1852947-01 Client ID: DUP Sample					
Iron, Total	53400	64400	mg/kg	19	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-01
Client ID: RB03_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:45
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/27/18 11:35	12/27/18 15:15	1,9010C/9012B	LH
Chromium, Hexavalent	0.181	J	mg/kg	0.854	0.171	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-02
Client ID: RB03_2-3
Sample Location: BRONX, NY

Date Collected: 12/26/18 09:50
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	0.24	J	mg/kg	1.0	0.22	1	12/27/18 11:35	12/27/18 14:46	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.892	0.178	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-03

Date Collected: 12/26/18 09:55

Client ID: RB03_10-12

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	3.0		mg/kg	1.2	0.25	1	12/27/18 11:35	12/27/18 14:47	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.979	0.196	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-04
Client ID: RB12_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 11:55
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.5		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.22	1	12/27/18 11:35	12/27/18 14:48	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.884	0.177	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-05
Client ID: RB12_8-9
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:00
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	0.66	J	mg/kg	1.1	0.23	1	12/27/18 11:35	12/27/18 14:49	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.863	0.172	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-06
Client ID: RB12_9-10
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:05
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.0		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.22	1	12/27/18 11:35	12/27/18 14:50	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.909	0.182	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-07
Client ID: RB12_10-12
Sample Location: BRONX, NY

Date Collected: 12/26/18 12:10
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.7		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/27/18 11:35	12/27/18 14:51	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.882	0.176	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-08
Client ID: RB02_0-2
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:25
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.5		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/27/18 11:35	12/27/18 14:54	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.856	0.171	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.**Lab Number:** L1853111**Project Number:** 170487001**Report Date:** 01/04/19**SAMPLE RESULTS**

Lab ID: L1853111-09

Date Collected: 12/26/18 13:30

Client ID: RB02_7-9

Date Received: 12/26/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	70.2		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	2.3		mg/kg	1.4	0.29	1	12/27/18 11:35	12/27/18 14:56	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.14	0.228	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-10
Client ID: RB02_10-12
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:35
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.1		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	0.28	J	mg/kg	1.1	0.22	1	12/27/18 11:35	12/27/18 14:57	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.878	0.176	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

SAMPLE RESULTS

Lab ID: L1853111-11
Client ID: RB02_13-15
Sample Location: BRONX, NY

Date Collected: 12/26/18 13:40
Date Received: 12/26/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.8		%	0.100	NA	1	-	12/27/18 10:39	121,2540G	RI
Cyanide, Total	1.1		mg/kg	1.1	0.24	1	12/27/18 11:35	12/27/18 14:58	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.978	0.196	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG1193065-1										
Cyanide, Total	ND		mg/kg	0.84	0.18	1	12/27/18 11:35	12/27/18 14:01	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 07-11 Batch: WG1193067-1										
Cyanide, Total	ND		mg/kg	0.84	0.18	1	12/27/18 11:35	12/27/18 14:02	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG1193257-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1193259-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	12/27/18 17:50	12/28/18 18:50	1,7196A	RM

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1193065-2 WG1193065-3								
Cyanide, Total	66	Q	91		80-120	28		35
General Chemistry - Westborough Lab Associated sample(s): 07-11 Batch: WG1193067-2 WG1193067-3								
Cyanide, Total	65	Q	89		80-120	29		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1193257-2								
Chromium, Hexavalent	100		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1193259-2								
Chromium, Hexavalent	100		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1193065-4 WG1193065-5 QC Sample: L1853087-01 Client ID: MS Sample												
Cyanide, Total	ND	12	11	96		10	91		75-125	10		35
General Chemistry - Westborough Lab Associated sample(s): 07-11 QC Batch ID: WG1193067-4 WG1193067-5 QC Sample: L1853134-01 Client ID: MS Sample												
Cyanide, Total	ND	12	11	94		12	100		75-125	9		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1193257-4 QC Sample: L1853111-10 Client ID: RB02_10-12												
Chromium, Hexavalent	ND	1230	1050	85		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193259-4 QC Sample: L1853111-11 Client ID: RB02_13-15												
Chromium, Hexavalent	ND	1500	882	59	Q	-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-11 QC Batch ID: WG1193077-1 QC Sample: L1853032-01 Client ID: DUP Sample						
Solids, Total	80.2	82.9	%	3		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1193257-6 QC Sample: L1853111-10 Client ID: RB02_10-12						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193259-6 QC Sample: L1853111-11 Client ID: RB02_13-15						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Serial_No:01041915:21
Lab Number: L1853111
Report Date: 01/04/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-01A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-01B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-01C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-01D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-01E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-01F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-01G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-02A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-02B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-02C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-02D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-02E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-02F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-02G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE + E. 146TH ST.

Lab Number: L1853111

Project Number: 170487001

Report Date: 01/04/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-03A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-03B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-03C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-03D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-03E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-03F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-03G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-04A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-04B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-04C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-04D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-04E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-04F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-04G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-05A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-05B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-05C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-05D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-05F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-05G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-06A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-06B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-06C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-06D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-06E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-06F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-06G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-07A	Vial MeOH preserved	B	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L1853111-07B	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-07C	Vial water preserved	B	NA		2.0	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-07D	Plastic 2oz unpreserved for TS	B	NA		2.0	Y	Absent		TS(7)
L1853111-07E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-07F	Glass 120ml/4oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

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Report Date: 01/04/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-07G	Glass 500ml/16oz unpreserved	B	NA		2.0	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-08A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-08B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-08C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-08D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1853111-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-08F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-08G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-09A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-09B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-09C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-09D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1853111-09E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-09F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-09G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-10A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-10B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-10C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-10D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853111-10E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-10F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-10G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-11A	Vial MeOH preserved	A	NA		2.4	Y	Absent		NYTCL-8260HLW(14)
L1853111-11B	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-11C	Vial water preserved	A	NA		2.4	Y	Absent	27-DEC-18 03:35	NYTCL-8260HLW(14)
L1853111-11D	Plastic 2oz unpreserved for TS	A	NA		2.4	Y	Absent		TS(7)
L1853111-11E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853111-11F	Glass 120ml/4oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-11G	Glass 500ml/16oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853111-12A	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L1853111-12B	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days



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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

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Report Date: 01/04/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853111
Report Date: 01/04/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522.

Non-Potable Water


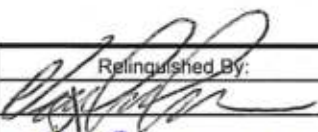

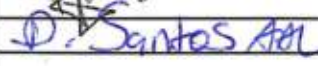
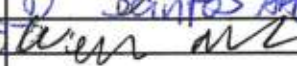
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


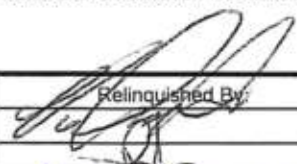
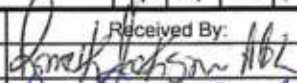
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EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #																																																																																																																																																													
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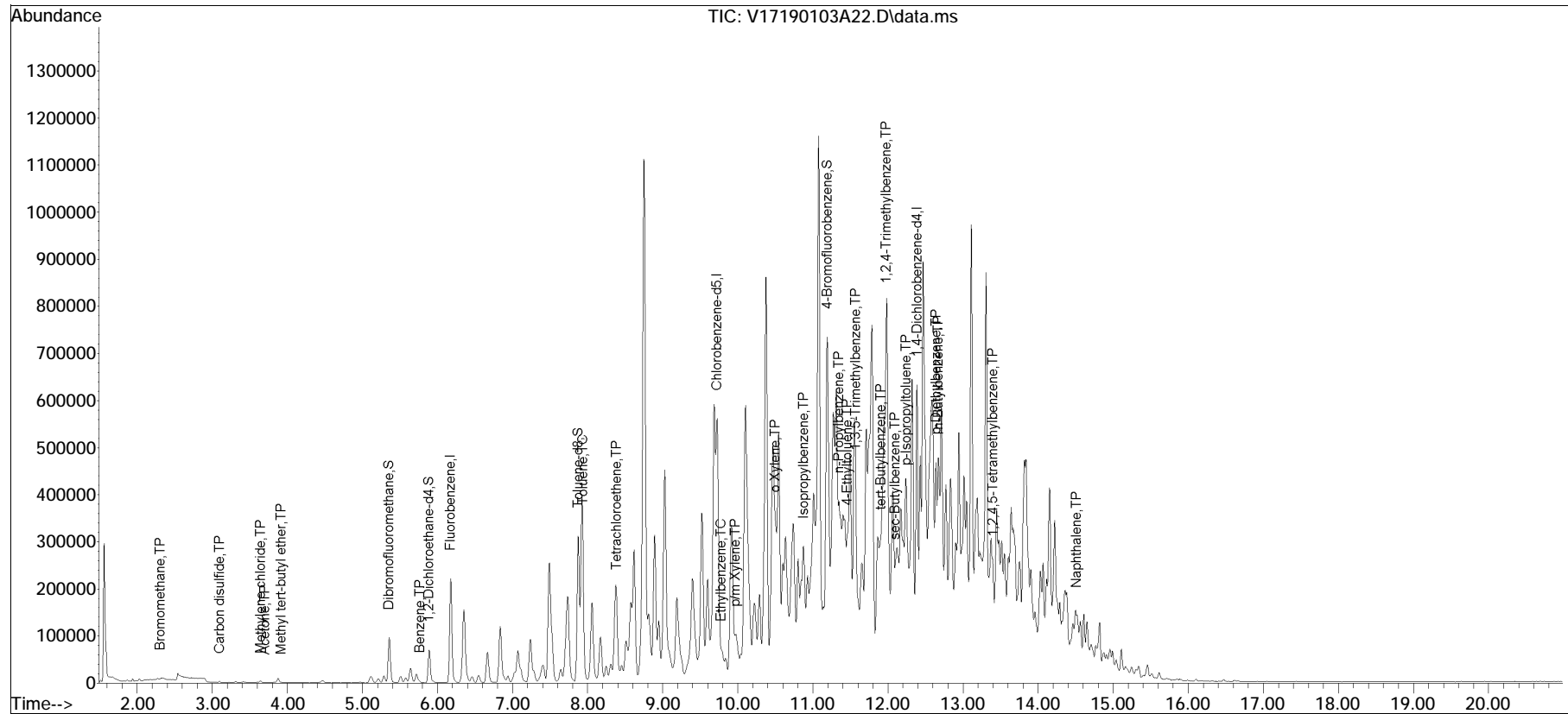
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Relinquished By: J. Santos		Date/Time: 12/26/18 1647		Received By: D. Santos																																																																																																																																																																								
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Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																																																																																																																												

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2019\190103A\
 Data File : V17190103A22.D
 Acq On : 04 Jan 2019 01:32
 Operator : VOA117:MV
 Sample : 11853111-01,31H,5.15,5,0.100,,a
 Misc : WG1194605,ICAL15123
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jan 04 06:07:57 2019
 Quant Method : I:\VOLATILES\VOA117\2019\190103A\V117_181010N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Oct 12 09:26:09 2018
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90103A\V17190103A02.D•

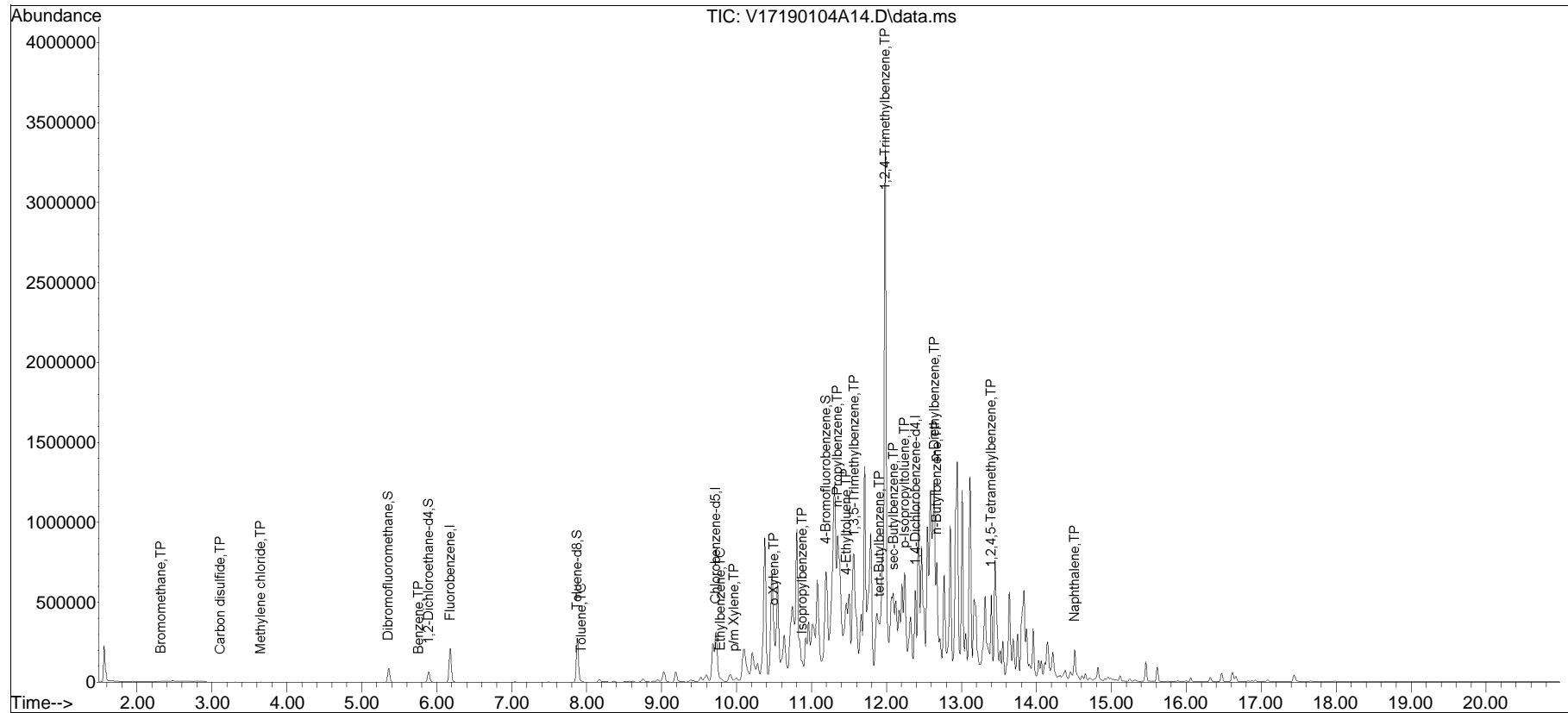


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA117\2019\190104A\
 Data File : V17190104A14.D
 Acq On : 04 Jan 2019 11:50 am
 Operator : VOA117:JC
 Sample : 11853111-05D,31H,4.56,5,0.050,,a
 Misc : WG1194817,ICAL15123
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 04 12:22:44 2019
 Quant Method : I:\VOLATILES\VOA117\2019\190104A\V117_181010N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Oct 12 09:26:09 2018
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90104A\V17190104A01.D•





ANALYTICAL REPORT

Lab Number:	L1853234
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/07/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1853234-01	RB01_0-2	SOIL	BRONX, NY	12/27/18 09:30	12/27/18
L1853234-02	RB01_14-15	SOIL	BRONX, NY	12/27/18 09:40	12/27/18
L1853234-03	RB01_25-27	SOIL	BRONX, NY	12/27/18 09:45	12/27/18
L1853234-04	RB08_0-2	SOIL	BRONX, NY	12/27/18 12:45	12/27/18
L1853234-05	RB08_10-12	SOIL	BRONX, NY	12/27/18 12:50	12/27/18
L1853234-06	RB08_12-14	SOIL	BRONX, NY	12/27/18 12:55	12/27/18
L1853234-07	RB08_14-16	SOIL	BRONX, NY	12/27/18 13:00	12/27/18
L1853234-08	SODUP02_122718	SOIL	BRONX, NY	12/27/18 00:00	12/27/18
L1853234-09	RB01_9-11	SOIL	BRONX, NY	12/27/18 09:35	12/27/18
L1853234-10	SOTB03_122718	WATER	BRONX, NY	12/27/18 00:00	12/27/18
L1853234-11	SOFB02_122718	WATER	BRONX, NY	12/27/18 10:45	12/27/18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Volatile Organics

L1853234-01: The internal standard (IS) response for 1,4-dichlorobenzene-d4 (43%) was below the acceptance criteria; however, re-analysis achieved similar results: 1,4-dichlorobenzene-d4 (39%). The results of both analyses are reported.

L1853234-02: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (146%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.

Semivolatile Organics

L1853234-09: The sample has elevated detection limits due to the dilution required by the sample matrix. The WG1193399-6/-7 MS/MSD recoveries, performed on L1853234-03, are below the acceptance criteria for 2,4-dinitrophenol (0%/0%) and benzoic acid (0%/0%) due to the concentration of these compounds falling below the reported detection limit.

Semivolatile Organics by SIM

L1853234-11 was extracted with the method required holding time exceeded.

The WG1194717-1 Method Blank, associated with L1853234-11, has a concentration above the reporting limit for Naphthalene. Since the sample was non-detect to the RL for this target analyte, no further actions were taken. The results of the original analysis are reported.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Case Narrative (continued)

Pesticides

L1853234-02 and -09: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1853234-02: The surrogate recoveries are outside the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (7680%) and decachlorobiphenyl (242%); however, the sample was not re-extracted due to coelution with obvious interferences.

L1853234-09: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L1853234-01 through -09: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1193639-3/-4 MS/MSD recoveries for aluminum (566%/304%), iron (1510%/836%) and manganese (MSD at 56%), performed on L1853234-03, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1193639-3/-4 MS/MSD recoveries, performed on L1853234-03, are outside the acceptance criteria for calcium (59%/43%), copper (MSD at 71%), lead (68%/64%), potassium (MS at 126%) and zinc (MSD at 72%). A post digestion spike was performed and was within acceptance criteria.

Cyanide, Total

The WG1193512-3 LCSD recovery (73%), associated with L1853234-01 through -09, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Hexavalent Chromium

The WG1193635-4/-5 Insoluble MS/MSD recoveries (14%/3%), performed on L1853234-03, are below the acceptance criteria. The Soluble MS recovery (17%) was also below criteria. This has been attributed to matrix

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Case Narrative (continued)

interference. A post-spike was performed with an acceptable recovery 104%.

The WG1193635-4/-5 MS/MSD RPD (129%), performed on L1853234-03, is above the acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 01/07/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 15:38
 Analyst: AD
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	12	5.3	1
1,1-Dichloroethane	ND		ug/kg	2.3	0.34	1
Chloroform	ND		ug/kg	3.5	0.33	1
Carbon tetrachloride	ND		ug/kg	2.3	0.54	1
1,2-Dichloropropane	ND		ug/kg	2.3	0.29	1
Dibromochloromethane	ND		ug/kg	2.3	0.33	1
1,1,2-Trichloroethane	ND		ug/kg	2.3	0.62	1
Tetrachloroethene	19		ug/kg	1.2	0.46	1
Chlorobenzene	ND		ug/kg	1.2	0.30	1
Trichlorofluoromethane	ND		ug/kg	9.3	1.6	1
1,2-Dichloroethane	ND		ug/kg	2.3	0.60	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.39	1
Bromodichloromethane	ND		ug/kg	1.2	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	2.3	0.64	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.37	1
1,3-Dichloropropene, Total	ND		ug/kg	1.2	0.37	1
1,1-Dichloropropene	ND		ug/kg	1.2	0.37	1
Bromoform	ND		ug/kg	9.3	0.57	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.39	1
Benzene	0.85	J	ug/kg	1.2	0.39	1
Toluene	1.6	J	ug/kg	2.3	1.3	1
Ethylbenzene	0.48	J	ug/kg	2.3	0.33	1
Chloromethane	ND		ug/kg	9.3	2.2	1
Bromomethane	ND		ug/kg	4.6	1.4	1
Vinyl chloride	ND		ug/kg	2.3	0.78	1
Chloroethane	ND		ug/kg	4.6	1.0	1
1,1-Dichloroethene	ND		ug/kg	2.3	0.55	1
trans-1,2-Dichloroethene	ND		ug/kg	3.5	0.32	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-01

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	1.2	0.32	1
1,2-Dichlorobenzene	ND		ug/kg	4.6	0.34	1
1,3-Dichlorobenzene	ND		ug/kg	4.6	0.34	1
1,4-Dichlorobenzene	ND		ug/kg	4.6	0.40	1
Methyl tert butyl ether	ND		ug/kg	4.6	0.47	1
p/m-Xylene	1.5	J	ug/kg	4.6	1.3	1
o-Xylene	ND		ug/kg	2.3	0.68	1
Xylenes, Total	1.5	J	ug/kg	2.3	0.68	1
cis-1,2-Dichloroethene	ND		ug/kg	2.3	0.41	1
1,2-Dichloroethene, Total	ND		ug/kg	2.3	0.32	1
Dibromomethane	ND		ug/kg	4.6	0.55	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	23	2.1	1
Acetone	15	J	ug/kg	23	11.	1
Carbon disulfide	ND		ug/kg	23	10.	1
2-Butanone	ND		ug/kg	23	5.2	1
Vinyl acetate	ND		ug/kg	23	5.0	1
4-Methyl-2-pentanone	ND		ug/kg	23	3.0	1
1,2,3-Trichloropropane	ND		ug/kg	4.6	0.30	1
2-Hexanone	ND		ug/kg	23	2.7	1
Bromochloromethane	ND		ug/kg	4.6	0.48	1
2,2-Dichloropropane	ND		ug/kg	4.6	0.47	1
1,2-Dibromoethane	ND		ug/kg	2.3	0.65	1
1,3-Dichloropropane	ND		ug/kg	4.6	0.39	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.31	1
Bromobenzene	ND		ug/kg	4.6	0.34	1
n-Butylbenzene	ND		ug/kg	2.3	0.39	1
sec-Butylbenzene	ND		ug/kg	2.3	0.34	1
tert-Butylbenzene	ND		ug/kg	4.6	0.27	1
o-Chlorotoluene	ND		ug/kg	4.6	0.44	1
p-Chlorotoluene	ND		ug/kg	4.6	0.25	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	7.0	2.3	1
Hexachlorobutadiene	ND		ug/kg	9.3	0.39	1
Isopropylbenzene	ND		ug/kg	2.3	0.25	1
p-Isopropyltoluene	ND		ug/kg	2.3	0.25	1
Naphthalene	ND		ug/kg	9.3	1.5	1
Acrylonitrile	ND		ug/kg	9.3	2.7	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	2.3	0.40	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.6	0.75	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.6	0.63	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.6	0.45	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.6	0.78	1
1,4-Dioxane	ND		ug/kg	230	82.	1
p-Diethylbenzene	ND		ug/kg	4.6	0.41	1
p-Ethyltoluene	ND		ug/kg	4.6	0.89	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.6	0.44	1
Ethyl ether	ND		ug/kg	4.6	0.79	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	12	3.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	122		70-130

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-01 R

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 01/02/19 22:16

Analyst: MV

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.8	3.6	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.23	1
Chloroform	0.50	J	ug/kg	2.3	0.22	1
Carbon tetrachloride	ND		ug/kg	1.6	0.36	1
1,2-Dichloropropane	ND		ug/kg	1.6	0.20	1
Dibromochloromethane	ND		ug/kg	1.6	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.42	1
Tetrachloroethene	42		ug/kg	0.78	0.31	1
Chlorobenzene	ND		ug/kg	0.78	0.20	1
Trichlorofluoromethane	ND		ug/kg	6.3	1.1	1
1,2-Dichloroethane	ND		ug/kg	1.6	0.40	1
1,1,1-Trichloroethane	ND		ug/kg	0.78	0.26	1
Bromodichloromethane	ND		ug/kg	0.78	0.17	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	0.43	1
cis-1,3-Dichloropropene	ND		ug/kg	0.78	0.25	1
1,3-Dichloropropene, Total	ND		ug/kg	0.78	0.25	1
1,1-Dichloropropene	ND		ug/kg	0.78	0.25	1
Bromoform	ND		ug/kg	6.3	0.38	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.78	0.26	1
Benzene	1.2		ug/kg	0.78	0.26	1
Toluene	2.9		ug/kg	1.6	0.85	1
Ethylbenzene	0.94	J	ug/kg	1.6	0.22	1
Chloromethane	ND		ug/kg	6.3	1.4	1
Bromomethane	ND		ug/kg	3.1	0.91	1
Vinyl chloride	ND		ug/kg	1.6	0.52	1
Chloroethane	ND		ug/kg	3.1	0.71	1
1,1-Dichloroethene	ND		ug/kg	1.6	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	2.3	0.21	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-01 R

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.78	0.21	1
1,2-Dichlorobenzene	ND		ug/kg	3.1	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	3.1	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	3.1	0.27	1
Methyl tert butyl ether	ND		ug/kg	3.1	0.31	1
p/m-Xylene	3.2		ug/kg	3.1	0.88	1
o-Xylene	1.1	J	ug/kg	1.6	0.46	1
Xylenes, Total	4.3	J	ug/kg	1.6	0.46	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	0.27	1
1,2-Dichloroethene, Total	ND		ug/kg	1.6	0.21	1
Dibromomethane	ND		ug/kg	3.1	0.37	1
Styrene	ND		ug/kg	1.6	0.31	1
Dichlorodifluoromethane	ND		ug/kg	16	1.4	1
Acetone	14	J	ug/kg	16	7.5	1
Carbon disulfide	ND		ug/kg	16	7.1	1
2-Butanone	ND		ug/kg	16	3.5	1
Vinyl acetate	ND		ug/kg	16	3.4	1
4-Methyl-2-pentanone	ND		ug/kg	16	2.0	1
1,2,3-Trichloropropane	ND		ug/kg	3.1	0.20	1
2-Hexanone	ND		ug/kg	16	1.8	1
Bromochloromethane	ND		ug/kg	3.1	0.32	1
2,2-Dichloropropane	ND		ug/kg	3.1	0.32	1
1,2-Dibromoethane	ND		ug/kg	1.6	0.44	1
1,3-Dichloropropane	ND		ug/kg	3.1	0.26	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.78	0.21	1
Bromobenzene	ND		ug/kg	3.1	0.23	1
n-Butylbenzene	ND		ug/kg	1.6	0.26	1
sec-Butylbenzene	ND		ug/kg	1.6	0.23	1
tert-Butylbenzene	ND		ug/kg	3.1	0.18	1
o-Chlorotoluene	ND		ug/kg	3.1	0.30	1
p-Chlorotoluene	ND		ug/kg	3.1	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	1.6	1
Hexachlorobutadiene	ND		ug/kg	6.3	0.26	1
Isopropylbenzene	ND		ug/kg	1.6	0.17	1
p-Isopropyltoluene	ND		ug/kg	1.6	0.17	1
Naphthalene	2.4	J	ug/kg	6.3	1.0	1
Acrylonitrile	ND		ug/kg	6.3	1.8	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01 R
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.6	0.27	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.1	0.50	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.1	0.42	1
1,3,5-Trimethylbenzene	3.1		ug/kg	3.1	0.30	1
1,2,4-Trimethylbenzene	4.3		ug/kg	3.1	0.52	1
1,4-Dioxane	ND		ug/kg	160	55.	1
p-Diethylbenzene	2.4	J	ug/kg	3.1	0.28	1
p-Ethyltoluene	2.4	J	ug/kg	3.1	0.60	1
1,2,4,5-Tetramethylbenzene	0.48	J	ug/kg	3.1	0.30	1
Ethyl ether	ND		ug/kg	3.1	0.53	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.8	2.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	124		70-130
4-Bromofluorobenzene	121		70-130
Dibromofluoromethane	109		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 14:59
 Analyst: MKS
 Percent Solids: 63%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	700	320	1
1,1-Dichloroethane	ND		ug/kg	140	20.	1
Chloroform	ND		ug/kg	210	20.	1
Carbon tetrachloride	ND		ug/kg	140	32.	1
1,2-Dichloropropane	ND		ug/kg	140	18.	1
Dibromochloromethane	ND		ug/kg	140	20.	1
1,1,2-Trichloroethane	ND		ug/kg	140	38.	1
Tetrachloroethene	ND		ug/kg	70	28.	1
Chlorobenzene	ND		ug/kg	70	18.	1
Trichlorofluoromethane	ND		ug/kg	560	98.	1
1,2-Dichloroethane	ND		ug/kg	140	36.	1
1,1,1-Trichloroethane	ND		ug/kg	70	24.	1
Bromodichloromethane	ND		ug/kg	70	15.	1
trans-1,3-Dichloropropene	ND		ug/kg	140	38.	1
cis-1,3-Dichloropropene	ND		ug/kg	70	22.	1
1,3-Dichloropropene, Total	ND		ug/kg	70	22.	1
1,1-Dichloropropene	ND		ug/kg	70	22.	1
Bromoform	ND		ug/kg	560	35.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	70	23.	1
Benzene	180		ug/kg	70	23.	1
Toluene	170		ug/kg	140	76.	1
Ethylbenzene	80	J	ug/kg	140	20.	1
Chloromethane	ND		ug/kg	560	130	1
Bromomethane	ND		ug/kg	280	82.	1
Vinyl chloride	ND		ug/kg	140	47.	1
Chloroethane	ND		ug/kg	280	64.	1
1,1-Dichloroethene	ND		ug/kg	140	34.	1
trans-1,2-Dichloroethene	ND		ug/kg	210	19.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-02

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	70	19.	1
1,2-Dichlorobenzene	ND		ug/kg	280	20.	1
1,3-Dichlorobenzene	ND		ug/kg	280	21.	1
1,4-Dichlorobenzene	ND		ug/kg	280	24.	1
Methyl tert butyl ether	ND		ug/kg	280	28.	1
p/m-Xylene	140	J	ug/kg	280	79.	1
o-Xylene	50	J	ug/kg	140	41.	1
Xylenes, Total	190	J	ug/kg	140	41.	1
cis-1,2-Dichloroethene	ND		ug/kg	140	25.	1
1,2-Dichloroethene, Total	ND		ug/kg	140	19.	1
Dibromomethane	ND		ug/kg	280	34.	1
Styrene	52	J	ug/kg	140	28.	1
Dichlorodifluoromethane	ND		ug/kg	1400	130	1
Acetone	2200		ug/kg	1400	680	1
Carbon disulfide	ND		ug/kg	1400	640	1
2-Butanone	350	J	ug/kg	1400	310	1
Vinyl acetate	ND		ug/kg	1400	300	1
4-Methyl-2-pentanone	ND		ug/kg	1400	180	1
1,2,3-Trichloropropane	ND		ug/kg	280	18.	1
2-Hexanone	ND		ug/kg	1400	170	1
Bromochloromethane	ND		ug/kg	280	29.	1
2,2-Dichloropropane	ND		ug/kg	280	28.	1
1,2-Dibromoethane	ND		ug/kg	140	39.	1
1,3-Dichloropropane	ND		ug/kg	280	24.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	70	18.	1
Bromobenzene	ND		ug/kg	280	20.	1
n-Butylbenzene	360		ug/kg	140	24.	1
sec-Butylbenzene	1000		ug/kg	140	20.	1
tert-Butylbenzene	ND		ug/kg	280	17.	1
o-Chlorotoluene	ND		ug/kg	280	27.	1
p-Chlorotoluene	ND		ug/kg	280	15.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	420	140	1
Hexachlorobutadiene	ND		ug/kg	560	24.	1
Isopropylbenzene	440		ug/kg	140	15.	1
p-Isopropyltoluene	100	J	ug/kg	140	15.	1
Naphthalene	1400		ug/kg	560	92.	1
Acrylonitrile	ND		ug/kg	560	160	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	ND		ug/kg	140	24.	1
1,2,3-Trichlorobenzene	ND		ug/kg	280	45.	1
1,2,4-Trichlorobenzene	ND		ug/kg	280	38.	1
1,3,5-Trimethylbenzene	ND		ug/kg	280	27.	1
1,2,4-Trimethylbenzene	67	J	ug/kg	280	47.	1
1,4-Dioxane	ND		ug/kg	14000	4900	1
p-Diethylbenzene	540		ug/kg	280	25.	1
p-Ethyltoluene	1200		ug/kg	280	54.	1
1,2,4,5-Tetramethylbenzene	4400		ug/kg	280	27.	1
Ethyl ether	ND		ug/kg	280	48.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	700	200	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	146	Q	70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/02/19 16:03
 Analyst: AD
 Percent Solids: 60%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.6	3.9	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.25	1
Chloroform	ND		ug/kg	2.6	0.24	1
Carbon tetrachloride	ND		ug/kg	1.7	0.40	1
1,2-Dichloropropane	ND		ug/kg	1.7	0.22	1
Dibromochloromethane	ND		ug/kg	1.7	0.24	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.46	1
Tetrachloroethene	ND		ug/kg	0.86	0.34	1
Chlorobenzene	ND		ug/kg	0.86	0.22	1
Trichlorofluoromethane	ND		ug/kg	6.9	1.2	1
1,2-Dichloroethane	ND		ug/kg	1.7	0.44	1
1,1,1-Trichloroethane	ND		ug/kg	0.86	0.29	1
Bromodichloromethane	ND		ug/kg	0.86	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.7	0.47	1
cis-1,3-Dichloropropene	ND		ug/kg	0.86	0.27	1
1,3-Dichloropropene, Total	ND		ug/kg	0.86	0.27	1
1,1-Dichloropropene	ND		ug/kg	0.86	0.27	1
Bromoform	ND		ug/kg	6.9	0.42	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.86	0.28	1
Benzene	ND		ug/kg	0.86	0.28	1
Toluene	ND		ug/kg	1.7	0.93	1
Ethylbenzene	ND		ug/kg	1.7	0.24	1
Chloromethane	ND		ug/kg	6.9	1.6	1
Bromomethane	ND		ug/kg	3.4	1.0	1
Vinyl chloride	ND		ug/kg	1.7	0.58	1
Chloroethane	ND		ug/kg	3.4	0.78	1
1,1-Dichloroethene	ND		ug/kg	1.7	0.41	1
trans-1,2-Dichloroethene	ND		ug/kg	2.6	0.24	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-03

Date Collected: 12/27/18 09:45

Client ID: RB01_25-27

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.86	0.24	1
1,2-Dichlorobenzene	ND		ug/kg	3.4	0.25	1
1,3-Dichlorobenzene	ND		ug/kg	3.4	0.25	1
1,4-Dichlorobenzene	ND		ug/kg	3.4	0.29	1
Methyl tert butyl ether	ND		ug/kg	3.4	0.34	1
p/m-Xylene	ND		ug/kg	3.4	0.96	1
o-Xylene	ND		ug/kg	1.7	0.50	1
Xylenes, Total	ND		ug/kg	1.7	0.50	1
cis-1,2-Dichloroethene	ND		ug/kg	1.7	0.30	1
1,2-Dichloroethene, Total	ND		ug/kg	1.7	0.24	1
Dibromomethane	ND		ug/kg	3.4	0.41	1
Styrene	ND		ug/kg	1.7	0.34	1
Dichlorodifluoromethane	ND		ug/kg	17	1.6	1
Acetone	70		ug/kg	17	8.3	1
Carbon disulfide	15	J	ug/kg	17	7.8	1
2-Butanone	9.4	J	ug/kg	17	3.8	1
Vinyl acetate	ND		ug/kg	17	3.7	1
4-Methyl-2-pentanone	ND		ug/kg	17	2.2	1
1,2,3-Trichloropropane	ND		ug/kg	3.4	0.22	1
2-Hexanone	ND		ug/kg	17	2.0	1
Bromochloromethane	ND		ug/kg	3.4	0.35	1
2,2-Dichloropropane	ND		ug/kg	3.4	0.35	1
1,2-Dibromoethane	ND		ug/kg	1.7	0.48	1
1,3-Dichloropropane	ND		ug/kg	3.4	0.29	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.86	0.23	1
Bromobenzene	ND		ug/kg	3.4	0.25	1
n-Butylbenzene	ND		ug/kg	1.7	0.29	1
sec-Butylbenzene	ND		ug/kg	1.7	0.25	1
tert-Butylbenzene	ND		ug/kg	3.4	0.20	1
o-Chlorotoluene	ND		ug/kg	3.4	0.33	1
p-Chlorotoluene	ND		ug/kg	3.4	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	1.7	1
Hexachlorobutadiene	ND		ug/kg	6.9	0.29	1
Isopropylbenzene	ND		ug/kg	1.7	0.19	1
p-Isopropyltoluene	ND		ug/kg	1.7	0.19	1
Naphthalene	ND		ug/kg	6.9	1.1	1
Acrylonitrile	ND		ug/kg	6.9	2.0	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
Client ID: RB01_25-27
Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.7	0.29	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.4	0.55	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.4	0.47	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.4	0.33	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.4	0.57	1
1,4-Dioxane	ND		ug/kg	170	60.	1
p-Diethylbenzene	ND		ug/kg	3.4	0.30	1
p-Ethyltoluene	ND		ug/kg	3.4	0.66	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.4	0.33	1
Ethyl ether	ND		ug/kg	3.4	0.59	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.6	2.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	114		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/05/19 17:29
 Analyst: AD
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	0.41	J	ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.79	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.57	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	ND		ug/kg	1.1	0.62	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.66	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.3	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.57	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.6	0.74	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
Client ID: RB08_0-2
Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	110	40.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.7	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 00:07
 Analyst: MV
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	0.25	J	ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.78	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Bromodichloromethane	ND		ug/kg	0.56	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.56	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.56	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.56	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.56	0.19	1
Benzene	0.23	J	ug/kg	0.56	0.19	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.2	0.65	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.2	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.23	1
p/m-Xylene	ND		ug/kg	2.2	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.4	1
Carbon disulfide	ND		ug/kg	11	5.1	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.56	0.15	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.5	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.5	0.73	1
Acrylonitrile	ND		ug/kg	4.5	1.3	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.38	1
1,4-Dioxane	ND		ug/kg	110	40.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.20	1
p-Ethyltoluene	ND		ug/kg	2.2	0.43	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.38	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.6	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	107		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 15:50
 Analyst: MKS
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.96	0.14	1
Chloroform	0.63	J	ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.96	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.96	0.12	1
Dibromochloromethane	ND		ug/kg	0.96	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.96	0.26	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	0.16	J	ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.96	0.52	1
Ethylbenzene	ND		ug/kg	0.96	0.14	1
Chloromethane	ND		ug/kg	3.8	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.96	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.54	1
o-Xylene	ND		ug/kg	0.96	0.28	1
Xylenes, Total	ND		ug/kg	0.96	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.96	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.96	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.88	1
Acetone	6.6	J	ug/kg	9.6	4.6	1
Carbon disulfide	ND		ug/kg	9.6	4.4	1
2-Butanone	ND		ug/kg	9.6	2.1	1
Vinyl acetate	ND		ug/kg	9.6	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.6	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.96	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.96	0.16	1
sec-Butylbenzene	ND		ug/kg	0.96	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.96	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.96	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.96	0.10	1
Naphthalene	1.1	J	ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.96	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	96	34.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 16:15
 Analyst: MKS
 Percent Solids: 68%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.1	3.2	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.1	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.33	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.38	1
Tetrachloroethene	ND		ug/kg	0.71	0.28	1
Chlorobenzene	ND		ug/kg	0.71	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.98	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.36	1
1,1,1-Trichloroethane	ND		ug/kg	0.71	0.24	1
Bromodichloromethane	ND		ug/kg	0.71	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.39	1
cis-1,3-Dichloropropene	ND		ug/kg	0.71	0.22	1
1,3-Dichloropropene, Total	ND		ug/kg	0.71	0.22	1
1,1-Dichloropropene	ND		ug/kg	0.71	0.22	1
Bromoform	ND		ug/kg	5.7	0.35	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.71	0.24	1
Benzene	ND		ug/kg	0.71	0.24	1
Toluene	ND		ug/kg	1.4	0.77	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.7	1.3	1
Bromomethane	ND		ug/kg	2.8	0.82	1
Vinyl chloride	ND		ug/kg	1.4	0.48	1
Chloroethane	ND		ug/kg	2.8	0.64	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.19	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-07

Date Collected: 12/27/18 13:00

Client ID: RB08_14-16

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.71	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.28	1
p/m-Xylene	ND		ug/kg	2.8	0.79	1
o-Xylene	ND		ug/kg	1.4	0.41	1
Xylenes, Total	ND		ug/kg	1.4	0.41	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.25	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.8	0.34	1
Styrene	ND		ug/kg	1.4	0.28	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	82		ug/kg	14	6.8	1
Carbon disulfide	ND		ug/kg	14	6.4	1
2-Butanone	14		ug/kg	14	3.1	1
Vinyl acetate	ND		ug/kg	14	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	0.18	1
2-Hexanone	ND		ug/kg	14	1.7	1
Bromochloromethane	ND		ug/kg	2.8	0.29	1
2,2-Dichloropropane	ND		ug/kg	2.8	0.29	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.40	1
1,3-Dichloropropane	ND		ug/kg	2.8	0.24	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.71	0.19	1
Bromobenzene	ND		ug/kg	2.8	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.24	1
sec-Butylbenzene	ND		ug/kg	1.4	0.21	1
tert-Butylbenzene	ND		ug/kg	2.8	0.17	1
o-Chlorotoluene	ND		ug/kg	2.8	0.27	1
p-Chlorotoluene	ND		ug/kg	2.8	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.7	0.24	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	0.27	J	ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.7	0.92	1
Acrylonitrile	ND		ug/kg	5.7	1.6	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
Client ID: RB08_14-16
Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.46	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.38	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.27	1
1,2,4-Trimethylbenzene	0.60	J	ug/kg	2.8	0.47	1
1,4-Dioxane	ND		ug/kg	140	50.	1
p-Diethylbenzene	0.32	J	ug/kg	2.8	0.25	1
p-Ethyltoluene	ND		ug/kg	2.8	0.54	1
1,2,4,5-Tetramethylbenzene	0.46	J	ug/kg	2.8	0.27	1
Ethyl ether	ND		ug/kg	2.8	0.48	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.1	2.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	127		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 14:34
 Analyst: MKS
 Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.2	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.34	1
Tetrachloroethene	ND		ug/kg	0.63	0.25	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.87	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.63	0.21	1
Bromodichloromethane	ND		ug/kg	0.63	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.63	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.0	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.63	0.21	1
Benzene	ND		ug/kg	0.63	0.21	1
Toluene	ND		ug/kg	1.2	0.68	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.73	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.25	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	28		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.7	1
2-Butanone	4.7	J	ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.63	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.82	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
1,4-Dioxane	ND		ug/kg	120	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.43	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.3	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/04/19 16:41
 Analyst: MKS
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.1	1.9	1
1,1-Dichloroethane	ND		ug/kg	0.81	0.12	1
Chloroform	ND		ug/kg	1.2	0.11	1
Carbon tetrachloride	ND		ug/kg	0.81	0.19	1
1,2-Dichloropropane	ND		ug/kg	0.81	0.10	1
Dibromochloromethane	ND		ug/kg	0.81	0.11	1
1,1,2-Trichloroethane	ND		ug/kg	0.81	0.22	1
Tetrachloroethene	2.2		ug/kg	0.41	0.16	1
Chlorobenzene	ND		ug/kg	0.41	0.10	1
Trichlorofluoromethane	ND		ug/kg	3.2	0.57	1
1,2-Dichloroethane	ND		ug/kg	0.81	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.41	0.14	1
Bromodichloromethane	ND		ug/kg	0.41	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.81	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	0.41	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	0.41	0.13	1
1,1-Dichloropropene	ND		ug/kg	0.41	0.13	1
Bromoform	ND		ug/kg	3.2	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.41	0.14	1
Benzene	0.32	J	ug/kg	0.41	0.14	1
Toluene	0.46	J	ug/kg	0.81	0.44	1
Ethylbenzene	ND		ug/kg	0.81	0.11	1
Chloromethane	ND		ug/kg	3.2	0.76	1
Bromomethane	ND		ug/kg	1.6	0.47	1
Vinyl chloride	ND		ug/kg	0.81	0.27	1
Chloroethane	ND		ug/kg	1.6	0.37	1
1,1-Dichloroethene	ND		ug/kg	0.81	0.19	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.11	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-09

Date Collected: 12/27/18 09:35

Client ID: RB01_9-11

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.41	0.11	1
1,2-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,4-Dichlorobenzene	ND		ug/kg	1.6	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.6	0.16	1
p/m-Xylene	ND		ug/kg	1.6	0.46	1
o-Xylene	ND		ug/kg	0.81	0.24	1
Xylenes, Total	ND		ug/kg	0.81	0.24	1
cis-1,2-Dichloroethene	ND		ug/kg	0.81	0.14	1
1,2-Dichloroethene, Total	ND		ug/kg	0.81	0.11	1
Dibromomethane	ND		ug/kg	1.6	0.19	1
Styrene	ND		ug/kg	0.81	0.16	1
Dichlorodifluoromethane	ND		ug/kg	8.1	0.74	1
Acetone	ND		ug/kg	8.1	3.9	1
Carbon disulfide	ND		ug/kg	8.1	3.7	1
2-Butanone	ND		ug/kg	8.1	1.8	1
Vinyl acetate	ND		ug/kg	8.1	1.8	1
4-Methyl-2-pentanone	ND		ug/kg	8.1	1.0	1
1,2,3-Trichloropropane	ND		ug/kg	1.6	0.10	1
2-Hexanone	ND		ug/kg	8.1	0.96	1
Bromochloromethane	ND		ug/kg	1.6	0.17	1
2,2-Dichloropropane	ND		ug/kg	1.6	0.16	1
1,2-Dibromoethane	ND		ug/kg	0.81	0.23	1
1,3-Dichloropropane	ND		ug/kg	1.6	0.14	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.41	0.11	1
Bromobenzene	ND		ug/kg	1.6	0.12	1
n-Butylbenzene	ND		ug/kg	0.81	0.14	1
sec-Butylbenzene	ND		ug/kg	0.81	0.12	1
tert-Butylbenzene	ND		ug/kg	1.6	0.10	1
o-Chlorotoluene	ND		ug/kg	1.6	0.16	1
p-Chlorotoluene	ND		ug/kg	1.6	0.09	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.4	0.81	1
Hexachlorobutadiene	ND		ug/kg	3.2	0.14	1
Isopropylbenzene	ND		ug/kg	0.81	0.09	1
p-Isopropyltoluene	ND		ug/kg	0.81	0.09	1
Naphthalene	ND		ug/kg	3.2	0.53	1
Acrylonitrile	ND		ug/kg	3.2	0.94	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09
Client ID: RB01_9-11
Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.81	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.6	0.26	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.6	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.6	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.6	0.27	1
1,4-Dioxane	ND		ug/kg	81	28.	1
p-Diethylbenzene	ND		ug/kg	1.6	0.14	1
p-Ethyltoluene	ND		ug/kg	1.6	0.31	1
1,2,4,5-Tetramethylbenzene	0.21	J	ug/kg	1.6	0.16	1
Ethyl ether	ND		ug/kg	1.6	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.1	1.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-10
 Client ID: SOTB03_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 15:09
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-10
 Client ID: SOTB03_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-10
 Client ID: SOTB03_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 15:45
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11

Date Collected: 12/27/18 10:45

Client ID: SOFB02_122718

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 08:09
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,03 Batch: WG1194141-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 08:09
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,03 Batch: WG1194141-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 08:09
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,03 Batch: WG1194141-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	110		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/02/19 19:31
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,05 Batch: WG1194326-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/19 19:31
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,05 Batch: WG1194326-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/02/19 19:31
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,05 Batch: WG1194326-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	105		70-130

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 10:18
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1194582-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/19 10:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1194582-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/03/19 10:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1194582-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06-09 Batch: WG1195020-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.90	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06-09 Batch: WG1195020-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 06-09 Batch: WG1195020-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02 Batch: WG1195021-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	45	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02 Batch: WG1195021-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/04/19 13:43
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02 Batch: WG1195021-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/05/19 09:52
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1195241-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.62	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/05/19 09:52
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1195241-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/05/19 09:52
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04 Batch: WG1195241-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	94		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1194141-3 WG1194141-4								
Methylene chloride	94		93		70-130	1		30
1,1-Dichloroethane	96		95		70-130	1		30
Chloroform	103		102		70-130	1		30
Carbon tetrachloride	115		116		70-130	1		30
1,2-Dichloropropane	89		89		70-130	0		30
Dibromochloromethane	96		98		70-130	2		30
1,1,2-Trichloroethane	92		93		70-130	1		30
Tetrachloroethene	110		109		70-130	1		30
Chlorobenzene	96		96		70-130	0		30
Trichlorofluoromethane	134		130		70-139	3		30
1,2-Dichloroethane	92		94		70-130	2		30
1,1,1-Trichloroethane	112		109		70-130	3		30
Bromodichloromethane	98		99		70-130	1		30
trans-1,3-Dichloropropene	95		95		70-130	0		30
cis-1,3-Dichloropropene	96		96		70-130	0		30
1,1-Dichloropropene	112		110		70-130	2		30
Bromoform	96		96		70-130	0		30
1,1,1,2-Tetrachloroethane	83		84		70-130	1		30
Benzene	100		99		70-130	1		30
Toluene	95		96		70-130	1		30
Ethylbenzene	96		97		70-130	1		30
Chloromethane	100		95		52-130	5		30
Bromomethane	103		99		57-147	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1194141-3 WG1194141-4								
Vinyl chloride	108		106		67-130	2		30
Chloroethane	105		104		50-151	1		30
1,1-Dichloroethene	106		105		65-135	1		30
trans-1,2-Dichloroethene	103		101		70-130	2		30
Trichloroethene	103		102		70-130	1		30
1,2-Dichlorobenzene	94		93		70-130	1		30
1,3-Dichlorobenzene	96		96		70-130	0		30
1,4-Dichlorobenzene	95		94		70-130	1		30
Methyl tert butyl ether	96		96		66-130	0		30
p/m-Xylene	99		100		70-130	1		30
o-Xylene	96		96		70-130	0		30
cis-1,2-Dichloroethene	100		98		70-130	2		30
Dibromomethane	98		99		70-130	1		30
Styrene	93		94		70-130	1		30
Dichlorodifluoromethane	92		89		30-146	3		30
Acetone	99		96		54-140	3		30
Carbon disulfide	105		104		59-130	1		30
2-Butanone	83		85		70-130	2		30
Vinyl acetate	103		103		70-130	0		30
4-Methyl-2-pentanone	77		76		70-130	1		30
1,2,3-Trichloropropane	88		88		68-130	0		30
2-Hexanone	70		72		70-130	3		30
Bromochloromethane	107		108		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1194141-3 WG1194141-4								
2,2-Dichloropropane	106		104		70-130	2		30
1,2-Dibromoethane	92		93		70-130	1		30
1,3-Dichloropropane	91		92		69-130	1		30
1,1,1,2-Tetrachloroethane	98		98		70-130	0		30
Bromobenzene	95		94		70-130	1		30
n-Butylbenzene	98		98		70-130	0		30
sec-Butylbenzene	94		94		70-130	0		30
tert-Butylbenzene	98		98		70-130	0		30
o-Chlorotoluene	103		103		70-130	0		30
p-Chlorotoluene	94		94		70-130	0		30
1,2-Dibromo-3-chloropropane	90		90		68-130	0		30
Hexachlorobutadiene	98		99		67-130	1		30
Isopropylbenzene	97		96		70-130	1		30
p-Isopropyltoluene	98		98		70-130	0		30
Naphthalene	87		88		70-130	1		30
Acrylonitrile	86		87		70-130	1		30
n-Propylbenzene	97		97		70-130	0		30
1,2,3-Trichlorobenzene	94		93		70-130	1		30
1,2,4-Trichlorobenzene	93		93		70-130	0		30
1,3,5-Trimethylbenzene	96		97		70-130	1		30
1,2,4-Trimethylbenzene	94		94		70-130	0		30
1,4-Dioxane	110		114		65-136	4		30
p-Diethylbenzene	92		93		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1194141-3 WG1194141-4								
p-Ethyltoluene	92		92		70-130	0		30
1,2,4,5-Tetramethylbenzene	88		87		70-130	1		30
Ethyl ether	98		98		67-130	0		30
trans-1,4-Dichloro-2-butene	81		83		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	100		102		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	96		94		70-130
Dibromofluoromethane	108		110		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 Batch: WG1194326-3 WG1194326-4								
Methylene chloride	82		79		70-130	4		30
1,1-Dichloroethane	94		90		70-130	4		30
Chloroform	91		89		70-130	2		30
Carbon tetrachloride	92		91		70-130	1		30
1,2-Dichloropropane	92		90		70-130	2		30
Dibromochloromethane	88		90		70-130	2		30
1,1,2-Trichloroethane	96		94		70-130	2		30
Tetrachloroethene	99		96		70-130	3		30
Chlorobenzene	93		92		70-130	1		30
Trichlorofluoromethane	74		72		70-139	3		30
1,2-Dichloroethane	91		93		70-130	2		30
1,1,1-Trichloroethane	96		93		70-130	3		30
Bromodichloromethane	90		91		70-130	1		30
trans-1,3-Dichloropropene	91		92		70-130	1		30
cis-1,3-Dichloropropene	87		86		70-130	1		30
1,1-Dichloropropene	107		102		70-130	5		30
Bromoform	85		90		70-130	6		30
1,1,2,2-Tetrachloroethane	92		93		70-130	1		30
Benzene	94		91		70-130	3		30
Toluene	99		97		70-130	2		30
Ethylbenzene	103		101		70-130	2		30
Chloromethane	91		82		52-130	10		30
Bromomethane	64		61		57-147	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 Batch: WG1194326-3 WG1194326-4								
Vinyl chloride	83		80		67-130	4		30
Chloroethane	72		67		50-151	7		30
1,1-Dichloroethene	83		82		65-135	1		30
trans-1,2-Dichloroethene	86		84		70-130	2		30
Trichloroethene	93		91		70-130	2		30
1,2-Dichlorobenzene	94		94		70-130	0		30
1,3-Dichlorobenzene	96		95		70-130	1		30
1,4-Dichlorobenzene	94		93		70-130	1		30
Methyl tert butyl ether	89		88		66-130	1		30
p/m-Xylene	103		101		70-130	2		30
o-Xylene	102		101		70-130	1		30
cis-1,2-Dichloroethene	89		87		70-130	2		30
Dibromomethane	89		88		70-130	1		30
Styrene	93		92		70-130	1		30
Dichlorodifluoromethane	59		56		30-146	5		30
Acetone	109		105		54-140	4		30
Carbon disulfide	84		80		59-130	5		30
2-Butanone	91		90		70-130	1		30
Vinyl acetate	106		105		70-130	1		30
4-Methyl-2-pentanone	90		92		70-130	2		30
1,2,3-Trichloropropane	94		96		68-130	2		30
2-Hexanone	93		94		70-130	1		30
Bromochloromethane	87		85		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 Batch: WG1194326-3 WG1194326-4								
2,2-Dichloropropane	98		96		70-130	2		30
1,2-Dibromoethane	93		94		70-130	1		30
1,3-Dichloropropane	97		97		69-130	0		30
1,1,1,2-Tetrachloroethane	93		94		70-130	1		30
Bromobenzene	91		91		70-130	0		30
n-Butylbenzene	108		106		70-130	2		30
sec-Butylbenzene	103		101		70-130	2		30
tert-Butylbenzene	106		104		70-130	2		30
o-Chlorotoluene	103		100		70-130	3		30
p-Chlorotoluene	104		103		70-130	1		30
1,2-Dibromo-3-chloropropane	84		86		68-130	2		30
Hexachlorobutadiene	93		93		67-130	0		30
Isopropylbenzene	108		105		70-130	3		30
p-Isopropyltoluene	108		107		70-130	1		30
Naphthalene	88		92		70-130	4		30
Acrylonitrile	86		88		70-130	2		30
n-Propylbenzene	105		104		70-130	1		30
1,2,3-Trichlorobenzene	89		92		70-130	3		30
1,2,4-Trichlorobenzene	93		94		70-130	1		30
1,3,5-Trimethylbenzene	106		103		70-130	3		30
1,2,4-Trimethylbenzene	108		106		70-130	2		30
1,4-Dioxane	106		109		65-136	3		30
p-Diethylbenzene	104		103		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 Batch: WG1194326-3 WG1194326-4								
p-Ethyltoluene	102		100		70-130	2		30
1,2,4,5-Tetramethylbenzene	95		95		70-130	0		30
Ethyl ether	69		65	Q	67-130	6		30
trans-1,4-Dichloro-2-butene	90		92		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	111		110		70-130
Toluene-d8	107		107		70-130
4-Bromofluorobenzene	108		108		70-130
Dibromofluoromethane	100		100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1194582-3 WG1194582-4								
Methylene chloride	99		98		70-130	1		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	99		100		70-130	1		20
Carbon tetrachloride	90		88		63-132	2		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	96		95		63-130	1		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	86		85		70-130	1		20
Chlorobenzene	98		99		75-130	1		20
Trichlorofluoromethane	92		90		62-150	2		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	91		89		67-130	2		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	85		85		70-130	0		20
cis-1,3-Dichloropropene	90		91		70-130	1		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	100		95		54-136	5		20
1,1,2,2-Tetrachloroethane	120		110		67-130	9		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	69		72		64-130	4		20
Bromomethane	49		48		39-139	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1194582-3 WG1194582-4								
Vinyl chloride	94		93		55-140	1		20
Chloroethane	100		98		55-138	2		20
1,1-Dichloroethene	92		90		61-145	2		20
trans-1,2-Dichloroethene	96		96		70-130	0		20
Trichloroethene	98		97		70-130	1		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		99		70-130	1		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	85		88		63-130	3		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	98		98		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	120		110		64-130	9		20
Acrylonitrile	120		120		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	56		55		36-147	2		20
Acetone	130		130		58-148	0		20
Carbon disulfide	86		86		51-130	0		20
2-Butanone	140	Q	140	Q	63-138	0		20
Vinyl acetate	130		130		70-130	0		20
4-Methyl-2-pentanone	110		110		59-130	0		20
2-Hexanone	120		120		57-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1194582-3 WG1194582-4									
Bromochloromethane	99		100		70-130		1		20
2,2-Dichloropropane	67		64		63-133		5		20
1,2-Dibromoethane	99		100		70-130		1		20
1,3-Dichloropropane	110		110		70-130		0		20
1,1,1,2-Tetrachloroethane	93		94		64-130		1		20
Bromobenzene	100		100		70-130		0		20
n-Butylbenzene	120		110		53-136		9		20
sec-Butylbenzene	110		110		70-130		0		20
tert-Butylbenzene	110		110		70-130		0		20
o-Chlorotoluene	110		110		70-130		0		20
p-Chlorotoluene	110		110		70-130		0		20
1,2-Dibromo-3-chloropropane	92		94		41-144		2		20
Hexachlorobutadiene	100		98		63-130		2		20
Isopropylbenzene	110		110		70-130		0		20
p-Isopropyltoluene	110		110		70-130		0		20
Naphthalene	110		110		70-130		0		20
n-Propylbenzene	120		110		69-130		9		20
1,2,3-Trichlorobenzene	100		100		70-130		0		20
1,2,4-Trichlorobenzene	99		99		70-130		0		20
1,3,5-Trimethylbenzene	110		110		64-130		0		20
1,2,4-Trimethylbenzene	110		110		70-130		0		20
1,4-Dioxane	120		120		56-162		0		20
p-Diethylbenzene	110		110		70-130		0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1194582-3 WG1194582-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	110		100		70-130	10		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	100		100		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	110		112		70-130
Toluene-d8	105		105		70-130
4-Bromofluorobenzene	113		112		70-130
Dibromofluoromethane	98		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06-09 Batch: WG1195020-3 WG1195020-4								
Methylene chloride	103		96		70-130	7		30
1,1-Dichloroethane	108		101		70-130	7		30
Chloroform	108		101		70-130	7		30
Carbon tetrachloride	108		101		70-130	7		30
1,2-Dichloropropane	104		99		70-130	5		30
Dibromochloromethane	109		103		70-130	6		30
1,1,2-Trichloroethane	106		101		70-130	5		30
Tetrachloroethene	111		103		70-130	7		30
Chlorobenzene	108		101		70-130	7		30
Trichlorofluoromethane	118		107		70-139	10		30
1,2-Dichloroethane	104		99		70-130	5		30
1,1,1-Trichloroethane	108		101		70-130	7		30
Bromodichloromethane	108		102		70-130	6		30
trans-1,3-Dichloropropene	111		106		70-130	5		30
cis-1,3-Dichloropropene	104		98		70-130	6		30
1,1-Dichloropropene	118		109		70-130	8		30
Bromoform	105		101		70-130	4		30
1,1,2,2-Tetrachloroethane	101		97		70-130	4		30
Benzene	107		99		70-130	8		30
Toluene	112		105		70-130	6		30
Ethylbenzene	113		105		70-130	7		30
Chloromethane	118		107		52-130	10		30
Bromomethane	109		100		57-147	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06-09 Batch: WG1195020-3 WG1195020-4								
Vinyl chloride	117		108		67-130	8		30
Chloroethane	114		99		50-151	14		30
1,1-Dichloroethene	110		100		65-135	10		30
trans-1,2-Dichloroethene	107		100		70-130	7		30
Trichloroethene	110		102		70-130	8		30
1,2-Dichlorobenzene	106		101		70-130	5		30
1,3-Dichlorobenzene	109		104		70-130	5		30
1,4-Dichlorobenzene	107		102		70-130	5		30
Methyl tert butyl ether	103		98		66-130	5		30
p/m-Xylene	114		106		70-130	7		30
o-Xylene	110		103		70-130	7		30
cis-1,2-Dichloroethene	108		101		70-130	7		30
Dibromomethane	101		97		70-130	4		30
Styrene	114		106		70-130	7		30
Dichlorodifluoromethane	123		115		30-146	7		30
Acetone	98		93		54-140	5		30
Carbon disulfide	102		93		59-130	9		30
2-Butanone	94		87		70-130	8		30
Vinyl acetate	90		85		70-130	6		30
4-Methyl-2-pentanone	95		87		70-130	9		30
1,2,3-Trichloropropane	105		99		68-130	6		30
2-Hexanone	96		90		70-130	6		30
Bromochloromethane	108		102		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06-09 Batch: WG1195020-3 WG1195020-4								
2,2-Dichloropropane	110		101		70-130	9		30
1,2-Dibromoethane	106		100		70-130	6		30
1,3-Dichloropropane	108		103		69-130	5		30
1,1,1,2-Tetrachloroethane	111		104		70-130	7		30
Bromobenzene	108		103		70-130	5		30
n-Butylbenzene	113		106		70-130	6		30
sec-Butylbenzene	113		107		70-130	5		30
tert-Butylbenzene	112		106		70-130	6		30
o-Chlorotoluene	113		103		70-130	9		30
p-Chlorotoluene	112		106		70-130	6		30
1,2-Dibromo-3-chloropropane	103		95		68-130	8		30
Hexachlorobutadiene	108		102		67-130	6		30
Isopropylbenzene	112		105		70-130	6		30
p-Isopropyltoluene	113		106		70-130	6		30
Naphthalene	105		100		70-130	5		30
Acrylonitrile	108		102		70-130	6		30
n-Propylbenzene	114		107		70-130	6		30
1,2,3-Trichlorobenzene	104		100		70-130	4		30
1,2,4-Trichlorobenzene	107		101		70-130	6		30
1,3,5-Trimethylbenzene	113		106		70-130	6		30
1,2,4-Trimethylbenzene	115		107		70-130	7		30
1,4-Dioxane	96		90		65-136	6		30
p-Diethylbenzene	101		94		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06-09 Batch: WG1195020-3 WG1195020-4								
p-Ethyltoluene	107		101		70-130	6		30
1,2,4,5-Tetramethylbenzene	102		96		70-130	6		30
Ethyl ether	109		102		67-130	7		30
trans-1,4-Dichloro-2-butene	106		100		70-130	6		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		94		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	95		96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1195021-3 WG1195021-4								
Methylene chloride	103		96		70-130	7		30
1,1-Dichloroethane	108		101		70-130	7		30
Chloroform	108		101		70-130	7		30
Carbon tetrachloride	108		101		70-130	7		30
1,2-Dichloropropane	104		99		70-130	5		30
Dibromochloromethane	109		103		70-130	6		30
1,1,2-Trichloroethane	106		101		70-130	5		30
Tetrachloroethene	111		103		70-130	7		30
Chlorobenzene	108		101		70-130	7		30
Trichlorofluoromethane	118		107		70-139	10		30
1,2-Dichloroethane	104		99		70-130	5		30
1,1,1-Trichloroethane	108		101		70-130	7		30
Bromodichloromethane	108		102		70-130	6		30
trans-1,3-Dichloropropene	111		106		70-130	5		30
cis-1,3-Dichloropropene	104		98		70-130	6		30
1,1-Dichloropropene	118		109		70-130	8		30
Bromoform	105		101		70-130	4		30
1,1,2,2-Tetrachloroethane	101		97		70-130	4		30
Benzene	107		99		70-130	8		30
Toluene	112		105		70-130	6		30
Ethylbenzene	113		105		70-130	7		30
Chloromethane	118		107		52-130	10		30
Bromomethane	109		100		57-147	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1195021-3 WG1195021-4								
Vinyl chloride	117		108		67-130	8		30
Chloroethane	114		99		50-151	14		30
1,1-Dichloroethene	110		100		65-135	10		30
trans-1,2-Dichloroethene	107		100		70-130	7		30
Trichloroethene	110		102		70-130	8		30
1,2-Dichlorobenzene	106		101		70-130	5		30
1,3-Dichlorobenzene	109		104		70-130	5		30
1,4-Dichlorobenzene	107		102		70-130	5		30
Methyl tert butyl ether	103		98		66-130	5		30
p/m-Xylene	114		106		70-130	7		30
o-Xylene	110		103		70-130	7		30
cis-1,2-Dichloroethene	108		101		70-130	7		30
Dibromomethane	101		97		70-130	4		30
Styrene	114		106		70-130	7		30
Dichlorodifluoromethane	123		115		30-146	7		30
Acetone	98		93		54-140	5		30
Carbon disulfide	102		93		59-130	9		30
2-Butanone	94		87		70-130	8		30
Vinyl acetate	90		85		70-130	6		30
4-Methyl-2-pentanone	95		87		70-130	9		30
1,2,3-Trichloropropane	105		99		68-130	6		30
2-Hexanone	96		90		70-130	6		30
Bromochloromethane	108		102		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1195021-3 WG1195021-4								
2,2-Dichloropropane	110		101		70-130	9		30
1,2-Dibromoethane	106		100		70-130	6		30
1,3-Dichloropropane	108		103		69-130	5		30
1,1,1,2-Tetrachloroethane	111		104		70-130	7		30
Bromobenzene	108		103		70-130	5		30
n-Butylbenzene	113		106		70-130	6		30
sec-Butylbenzene	113		107		70-130	5		30
tert-Butylbenzene	112		106		70-130	6		30
o-Chlorotoluene	113		103		70-130	9		30
p-Chlorotoluene	112		106		70-130	6		30
1,2-Dibromo-3-chloropropane	103		95		68-130	8		30
Hexachlorobutadiene	108		102		67-130	6		30
Isopropylbenzene	112		105		70-130	6		30
p-Isopropyltoluene	113		106		70-130	6		30
Naphthalene	105		100		70-130	5		30
Acrylonitrile	108		102		70-130	6		30
n-Propylbenzene	114		107		70-130	6		30
1,2,3-Trichlorobenzene	104		100		70-130	4		30
1,2,4-Trichlorobenzene	107		101		70-130	6		30
1,3,5-Trimethylbenzene	113		106		70-130	6		30
1,2,4-Trimethylbenzene	115		107		70-130	7		30
1,4-Dioxane	96		90		65-136	6		30
p-Diethylbenzene	101		94		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1195021-3 WG1195021-4								
p-Ethyltoluene	107		101		70-130	6		30
1,2,4,5-Tetramethylbenzene	102		96		70-130	6		30
Ethyl ether	109		102		67-130	7		30
trans-1,4-Dichloro-2-butene	106		100		70-130	6		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		94		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	95		96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1195241-3 WG1195241-4								
Methylene chloride	91		91		70-130	0		30
1,1-Dichloroethane	96		95		70-130	1		30
Chloroform	97		96		70-130	1		30
Carbon tetrachloride	102		99		70-130	3		30
1,2-Dichloropropane	96		96		70-130	0		30
Dibromochloromethane	99		99		70-130	0		30
1,1,2-Trichloroethane	98		97		70-130	1		30
Tetrachloroethene	104		102		70-130	2		30
Chlorobenzene	99		99		70-130	0		30
Trichlorofluoromethane	104		100		70-139	4		30
1,2-Dichloroethane	96		94		70-130	2		30
1,1,1-Trichloroethane	101		100		70-130	1		30
Bromodichloromethane	99		97		70-130	2		30
trans-1,3-Dichloropropene	100		100		70-130	0		30
cis-1,3-Dichloropropene	99		97		70-130	2		30
1,1-Dichloropropene	103		102		70-130	1		30
Bromoform	101		100		70-130	1		30
1,1,2,2-Tetrachloroethane	99		98		70-130	1		30
Benzene	97		96		70-130	1		30
Toluene	101		100		70-130	1		30
Ethylbenzene	103		102		70-130	1		30
Chloromethane	96		94		52-130	2		30
Bromomethane	89		88		57-147	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1195241-3 WG1195241-4								
Vinyl chloride	99		98		67-130	1		30
Chloroethane	97		94		50-151	3		30
1,1-Dichloroethene	101		99		65-135	2		30
trans-1,2-Dichloroethene	98		97		70-130	1		30
Trichloroethene	99		97		70-130	2		30
1,2-Dichlorobenzene	100		99		70-130	1		30
1,3-Dichlorobenzene	102		101		70-130	1		30
1,4-Dichlorobenzene	100		100		70-130	0		30
Methyl tert butyl ether	96		95		66-130	1		30
p/m-Xylene	104		102		70-130	2		30
o-Xylene	103		103		70-130	0		30
cis-1,2-Dichloroethene	96		95		70-130	1		30
Dibromomethane	94		94		70-130	0		30
Styrene	104		104		70-130	0		30
Dichlorodifluoromethane	103		100		30-146	3		30
Acetone	95		94		54-140	1		30
Carbon disulfide	95		93		59-130	2		30
2-Butanone	92		92		70-130	0		30
Vinyl acetate	95		94		70-130	1		30
4-Methyl-2-pentanone	93		94		70-130	1		30
1,2,3-Trichloropropane	99		98		68-130	1		30
2-Hexanone	97		96		70-130	1		30
Bromochloromethane	96		96		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1195241-3 WG1195241-4								
2,2-Dichloropropane	101		99		70-130	2		30
1,2-Dibromoethane	99		99		70-130	0		30
1,3-Dichloropropane	99		100		69-130	1		30
1,1,1,2-Tetrachloroethane	102		101		70-130	1		30
Bromobenzene	101		100		70-130	1		30
n-Butylbenzene	107		106		70-130	1		30
sec-Butylbenzene	108		106		70-130	2		30
tert-Butylbenzene	107		106		70-130	1		30
o-Chlorotoluene	106		102		70-130	4		30
p-Chlorotoluene	104		103		70-130	1		30
1,2-Dibromo-3-chloropropane	97		96		68-130	1		30
Hexachlorobutadiene	105		104		67-130	1		30
Isopropylbenzene	106		105		70-130	1		30
p-Isopropyltoluene	107		107		70-130	0		30
Naphthalene	98		99		70-130	1		30
Acrylonitrile	98		97		70-130	1		30
n-Propylbenzene	106		104		70-130	2		30
1,2,3-Trichlorobenzene	99		97		70-130	2		30
1,2,4-Trichlorobenzene	100		100		70-130	0		30
1,3,5-Trimethylbenzene	105		104		70-130	1		30
1,2,4-Trimethylbenzene	105		104		70-130	1		30
1,4-Dioxane	96		96		65-136	0		30
p-Diethylbenzene	105		105		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04 Batch: WG1195241-3 WG1195241-4								
p-Ethyltoluene	106		104		70-130	2		30
1,2,4,5-Tetramethylbenzene	104		104		70-130	0		30
Ethyl ether	97		95		67-130	2		30
trans-1,4-Dichloro-2-butene	100		98		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	92		91		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	94		94		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG1194141-6 WG1194141-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
Methylene chloride	ND	166	110	65	Q	95	69	Q	70-130	12		30
1,1-Dichloroethane	ND	166	120	73		110	79		70-130	10		30
Chloroform	ND	166	120	74		110	77		70-130	13		30
Carbon tetrachloride	ND	166	100	62	Q	110	82		70-130	9		30
1,2-Dichloropropane	ND	166	110	63	Q	91	66	Q	70-130	15		30
Dibromochloromethane	ND	166	79	48	Q	66	48	Q	70-130	18		30
1,1,2-Trichloroethane	ND	166	91	55	Q	78	56	Q	70-130	15		30
Tetrachloroethene	ND	166	100	61	Q	88	64	Q	70-130	13		30
Chlorobenzene	ND	166	81	49	Q	66	48	Q	70-130	19		30
Trichlorofluoromethane	ND	166	170	104		170	122		70-139	2		30
1,2-Dichloroethane	ND	166	98	59	Q	84	61	Q	70-130	15		30
1,1,1-Trichloroethane	ND	166	140	84		130	93		70-130	8		30
Bromodichloromethane	ND	166	97	59	Q	84	61	Q	70-130	14		30
trans-1,3-Dichloropropene	ND	166	61	36	Q	51	37	Q	70-130	17		30
cis-1,3-Dichloropropene	ND	166	71	43	Q	61	44	Q	70-130	16		30
1,1-Dichloropropene	ND	166	130	75		120	86		70-130	5		30
Bromoform	ND	166	71	43	Q	58	42	Q	70-130	20		30
1,1,2,2-Tetrachloroethane	ND	166	73	44	Q	62	45	Q	70-130	16		30
Benzene	ND	166	120	71		100	75		70-130	13		30
Toluene	ND	166	99	60	Q	84	60	Q	70-130	17		30
Ethylbenzene	ND	166	90	54	Q	72	52	Q	70-130	22		30
Chloromethane	ND	166	130	77		120	83		52-130	10		30
Bromomethane	ND	166	110	65		100	75		57-147	4		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG1194141-6 WG1194141-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
Vinyl chloride	ND	166	140	87		140	100		67-130	4		30
Chloroethane	ND	166	130	78		120	85		50-151	10		30
1,1-Dichloroethene	ND	166	130	81		130	96		65-135	1		30
trans-1,2-Dichloroethene	ND	166	110	64	Q	100	74		70-130	3		30
Trichloroethene	ND	166	110	66	Q	99	72		70-130	10		30
1,2-Dichlorobenzene	ND	166	56	34	Q	48	35	Q	70-130	15		30
1,3-Dichlorobenzene	ND	166	56	34	Q	48	35	Q	70-130	15		30
1,4-Dichlorobenzene	ND	166	53	32	Q	44	32	Q	70-130	19		30
Methyl tert butyl ether	ND	166	110	67		97	70		66-130	13		30
p/m-Xylene	ND	332	180	53	Q	140	50	Q	70-130	24		30
o-Xylene	ND	332	180	53	Q	140	50	Q	70-130	23		30
cis-1,2-Dichloroethene	ND	166	110	64	Q	96	70		70-130	10		30
Dibromomethane	ND	166	98	59	Q	84	60	Q	70-130	16		30
Styrene	ND	332	90	27	Q	83	30	Q	70-130	9		30
Dichlorodifluoromethane	ND	166	130	76		130	90		30-146	1		30
Acetone	70	166	170	58		130	43	Q	54-140	25		30
Carbon disulfide	15J	166	130	77		130	91		59-130	2		30
2-Butanone	9.4J	166	100	62	Q	85	61	Q	70-130	19		30
Vinyl acetate	ND	166	32	19	Q	29	21	Q	70-130	8		30
4-Methyl-2-pentanone	ND	166	79	48	Q	68	49	Q	70-130	15		30
1,2,3-Trichloropropane	ND	166	80	48	Q	67	49	Q	68-130	17		30
2-Hexanone	ND	166	69	42	Q	59	43	Q	70-130	16		30
Bromochloromethane	ND	166	110	69	Q	96	69	Q	70-130	17		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG1194141-6 WG1194141-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
2,2-Dichloropropane	ND	166	130	79		120	89		70-130	6		30
1,2-Dibromoethane	ND	166	77	46	Q	64	46	Q	70-130	18		30
1,3-Dichloropropane	ND	166	86	52	Q	73	53	Q	69-130	16		30
1,1,1,2-Tetrachloroethane	ND	166	85	51	Q	71	51	Q	70-130	18		30
Bromobenzene	ND	166	69	41	Q	56	41	Q	70-130	20		30
n-Butylbenzene	ND	166	63	38	Q	49	36	Q	70-130	23		30
sec-Butylbenzene	ND	166	73	44	Q	59	43	Q	70-130	21		30
tert-Butylbenzene	ND	166	81	49	Q	66	48	Q	70-130	20		30
o-Chlorotoluene	ND	166	82	49	Q	65	47	Q	70-130	23		30
p-Chlorotoluene	ND	166	65	39	Q	52	38	Q	70-130	23		30
1,2-Dibromo-3-chloropropane	ND	166	68	41	Q	59	42	Q	68-130	14		30
Hexachlorobutadiene	ND	166	47	28	Q	44	32	Q	67-130	7		30
Isopropylbenzene	ND	166	88	53	Q	72	52	Q	70-130	20		30
p-Isopropyltoluene	ND	166	73	44	Q	57	41	Q	70-130	24		30
Naphthalene	ND	166	34	20	Q	35	26	Q	70-130	4		30
Acrylonitrile	ND	166	77	47	Q	65	47	Q	70-130	17		30
n-Propylbenzene	ND	166	79	48	Q	62	45	Q	70-130	25		30
1,2,3-Trichlorobenzene	ND	166	30	18	Q	31	23	Q	70-130	5		30
1,2,4-Trichlorobenzene	ND	166	32	20	Q	33	24	Q	70-130	3		30
1,3,5-Trimethylbenzene	ND	166	79	48	Q	63	45	Q	70-130	23		30
1,2,4-Trimethylbenzene	ND	166	74	44	Q	58	42	Q	70-130	24		30
1,4-Dioxane	ND	8290	4800	57	Q	3700	54	Q	65-136	25		30
p-Diethylbenzene	ND	166	63	38	Q	49	35	Q	70-130	26		30

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG1194141-6 WG1194141-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
p-Ethyltoluene	ND	166	75	45	Q	57	41	Q	70-130	27		30
1,2,4,5-Tetramethylbenzene	ND	166	53	32	Q	48	35	Q	70-130	10		30
Ethyl ether	ND	166	110	68		99	72		67-130	13		30
trans-1,4-Dichloro-2-butene	ND	166	28	17	Q	21	15	Q	70-130	32	Q	30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		105		70-130
4-Bromofluorobenzene	99		102		70-130
Dibromofluoromethane	112		111		70-130
Toluene-d8	97		97		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 01:49
 Analyst: EK
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	160		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	3600		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	430		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	100	J	ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	1800		ug/kg	120	22.	1
Benzo(a)pyrene	1800		ug/kg	160	48.	1
Benzo(b)fluoranthene	2600		ug/kg	120	33.	1
Benzo(k)fluoranthene	850		ug/kg	120	32.	1
Chrysene	2300		ug/kg	120	20.	1
Acenaphthylene	660		ug/kg	160	30.	1
Anthracene	540		ug/kg	120	38.	1
Benzo(ghi)perylene	1900		ug/kg	160	23.	1
Fluorene	210		ug/kg	200	19.	1
Phenanthrene	2800		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	390		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	1600		ug/kg	160	28.	1
Pyrene	3400		ug/kg	120	20.	1
Biphenyl	50	J	ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	140	J	ug/kg	200	19.	1
2-Methylnaphthalene	170	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	350		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	430	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	95.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	34	J	ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	54	J	ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	440		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		25-120
Phenol-d6	43		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	63		30-120
2,4,6-Tribromophenol	41		10-136
4-Terphenyl-d14	52		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02 D
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/07/19 03:30
 Analyst: EK
 Percent Solids: 63%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	12000		ug/kg	1000	130	5
1,2,4-Trichlorobenzene	ND		ug/kg	1300	150	5
Hexachlorobenzene	ND		ug/kg	780	140	5
Bis(2-chloroethyl)ether	ND		ug/kg	1200	180	5
2-Chloronaphthalene	ND		ug/kg	1300	130	5
1,2-Dichlorobenzene	ND		ug/kg	1300	230	5
1,3-Dichlorobenzene	ND		ug/kg	1300	220	5
1,4-Dichlorobenzene	ND		ug/kg	1300	230	5
3,3'-Dichlorobenzidine	ND		ug/kg	1300	340	5
2,4-Dinitrotoluene	ND		ug/kg	1300	260	5
2,6-Dinitrotoluene	ND		ug/kg	1300	220	5
Fluoranthene	17000		ug/kg	780	150	5
4-Chlorophenyl phenyl ether	ND		ug/kg	1300	140	5
4-Bromophenyl phenyl ether	ND		ug/kg	1300	200	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1600	220	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1400	130	5
Hexachlorobutadiene	ND		ug/kg	1300	190	5
Hexachlorocyclopentadiene	ND		ug/kg	3700	1200	5
Hexachloroethane	ND		ug/kg	1000	210	5
Isophorone	ND		ug/kg	1200	170	5
Naphthalene	5100		ug/kg	1300	160	5
Nitrobenzene	ND		ug/kg	1200	190	5
NDPA/DPA	ND		ug/kg	1000	150	5
n-Nitrosodi-n-propylamine	ND		ug/kg	1300	200	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1300	450	5
Butyl benzyl phthalate	ND		ug/kg	1300	330	5
Di-n-butylphthalate	ND		ug/kg	1300	250	5
Di-n-octylphthalate	ND		ug/kg	1300	440	5

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02 D

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	1300	120	5
Dimethyl phthalate	ND		ug/kg	1300	270	5
Benzo(a)anthracene	10000		ug/kg	780	150	5
Benzo(a)pyrene	13000		ug/kg	1000	320	5
Benzo(b)fluoranthene	11000		ug/kg	780	220	5
Benzo(k)fluoranthene	2200		ug/kg	780	210	5
Chrysene	12000		ug/kg	780	140	5
Acenaphthylene	10000		ug/kg	1000	200	5
Anthracene	3700		ug/kg	780	250	5
Benzo(ghi)perylene	5500		ug/kg	1000	150	5
Fluorene	2300		ug/kg	1300	130	5
Phenanthrene	3300		ug/kg	780	160	5
Dibenzo(a,h)anthracene	1200		ug/kg	780	150	5
Indeno(1,2,3-cd)pyrene	4200		ug/kg	1000	180	5
Pyrene	29000		ug/kg	780	130	5
Biphenyl	690	J	ug/kg	3000	300	5
4-Chloroaniline	ND		ug/kg	1300	240	5
2-Nitroaniline	ND		ug/kg	1300	250	5
3-Nitroaniline	ND		ug/kg	1300	240	5
4-Nitroaniline	ND		ug/kg	1300	540	5
Dibenzofuran	420	J	ug/kg	1300	120	5
2-Methylnaphthalene	1700		ug/kg	1600	160	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1300	140	5
Acetophenone	ND		ug/kg	1300	160	5
2,4,6-Trichlorophenol	ND		ug/kg	780	250	5
p-Chloro-m-cresol	ND		ug/kg	1300	190	5
2-Chlorophenol	ND		ug/kg	1300	150	5
2,4-Dichlorophenol	ND		ug/kg	1200	210	5
2,4-Dimethylphenol	ND		ug/kg	1300	430	5
2-Nitrophenol	ND		ug/kg	2800	490	5
4-Nitrophenol	ND		ug/kg	1800	530	5
2,4-Dinitrophenol	ND		ug/kg	6200	600	5
4,6-Dinitro-o-cresol	ND		ug/kg	3400	620	5
Pentachlorophenol	ND		ug/kg	1000	290	5
Phenol	ND		ug/kg	1300	200	5
2-Methylphenol	ND		ug/kg	1300	200	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1900	200	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02 D
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	1300	250	5
Benzoic Acid	ND		ug/kg	4200	1300	5
Benzyl Alcohol	ND		ug/kg	1300	400	5
Carbazole	420	J	ug/kg	1300	130	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	105		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	88		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/02/19 22:14
 Analyst: EK
 Percent Solids: 60%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140	J	ug/kg	210	28.	1
1,2,4-Trichlorobenzene	ND		ug/kg	270	31.	1
Hexachlorobenzene	ND		ug/kg	160	30.	1
Bis(2-chloroethyl)ether	ND		ug/kg	240	36.	1
2-Chloronaphthalene	ND		ug/kg	270	26.	1
1,2-Dichlorobenzene	ND		ug/kg	270	48.	1
1,3-Dichlorobenzene	ND		ug/kg	270	46.	1
1,4-Dichlorobenzene	ND		ug/kg	270	47.	1
3,3'-Dichlorobenzidine	ND		ug/kg	270	71.	1
2,4-Dinitrotoluene	ND		ug/kg	270	54.	1
2,6-Dinitrotoluene	ND		ug/kg	270	46.	1
Fluoranthene	270		ug/kg	160	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	270	29.	1
4-Bromophenyl phenyl ether	ND		ug/kg	270	41.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	320	46.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	290	27.	1
Hexachlorobutadiene	ND		ug/kg	270	39.	1
Hexachlorocyclopentadiene	ND		ug/kg	770	240	1
Hexachloroethane	ND		ug/kg	210	43.	1
Isophorone	ND		ug/kg	240	35.	1
Naphthalene	230	J	ug/kg	270	33.	1
Nitrobenzene	ND		ug/kg	240	40.	1
NDPA/DPA	ND		ug/kg	210	30.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	270	41.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	270	93.	1
Butyl benzyl phthalate	ND		ug/kg	270	68.	1
Di-n-butylphthalate	ND		ug/kg	270	51.	1
Di-n-octylphthalate	ND		ug/kg	270	91.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-03

Date Collected: 12/27/18 09:45

Client ID: RB01_25-27

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	270	25.	1
Dimethyl phthalate	ND		ug/kg	270	56.	1
Benzo(a)anthracene	130	J	ug/kg	160	30.	1
Benzo(a)pyrene	120	J	ug/kg	210	65.	1
Benzo(b)fluoranthene	110	J	ug/kg	160	45.	1
Benzo(k)fluoranthene	ND		ug/kg	160	43.	1
Chrysene	120	J	ug/kg	160	28.	1
Acenaphthylene	96	J	ug/kg	210	41.	1
Anthracene	74	J	ug/kg	160	52.	1
Benzo(ghi)perylene	73	J	ug/kg	210	32.	1
Fluorene	56	J	ug/kg	270	26.	1
Phenanthrene	160		ug/kg	160	32.	1
Dibenzo(a,h)anthracene	ND		ug/kg	160	31.	1
Indeno(1,2,3-cd)pyrene	55	J	ug/kg	210	37.	1
Pyrene	390		ug/kg	160	27.	1
Biphenyl	ND		ug/kg	610	62.	1
4-Chloroaniline	ND		ug/kg	270	49.	1
2-Nitroaniline	ND		ug/kg	270	52.	1
3-Nitroaniline	ND		ug/kg	270	50.	1
4-Nitroaniline	ND		ug/kg	270	110	1
Dibenzofuran	29	J	ug/kg	270	25.	1
2-Methylnaphthalene	38	J	ug/kg	320	32.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	270	28.	1
Acetophenone	ND		ug/kg	270	33.	1
2,4,6-Trichlorophenol	ND		ug/kg	160	51.	1
p-Chloro-m-cresol	ND		ug/kg	270	40.	1
2-Chlorophenol	ND		ug/kg	270	32.	1
2,4-Dichlorophenol	ND		ug/kg	240	43.	1
2,4-Dimethylphenol	ND		ug/kg	270	88.	1
2-Nitrophenol	ND		ug/kg	580	100	1
4-Nitrophenol	ND		ug/kg	380	110	1
2,4-Dinitrophenol	ND		ug/kg	1300	120	1
4,6-Dinitro-o-cresol	ND		ug/kg	700	130	1
Pentachlorophenol	ND		ug/kg	210	59.	1
Phenol	ND		ug/kg	270	40.	1
2-Methylphenol	ND		ug/kg	270	42.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	380	42.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	270	51.	1
Benzoic Acid	ND		ug/kg	870	270	1
Benzyl Alcohol	ND		ug/kg	270	82.	1
Carbazole	ND		ug/kg	270	26.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	62		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 04:13
 Analyst: EK
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	54	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1800		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	65	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	1200		ug/kg	190	65.	1
Butyl benzyl phthalate	59	J	ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	200		ug/kg	190	64.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	1000		ug/kg	110	21.	1
Benzo(a)pyrene	760		ug/kg	150	46.	1
Benzo(b)fluoranthene	1000		ug/kg	110	32.	1
Benzo(k)fluoranthene	420		ug/kg	110	30.	1
Chrysene	950		ug/kg	110	19.	1
Acenaphthylene	340		ug/kg	150	29.	1
Anthracene	340		ug/kg	110	36.	1
Benzo(ghi)perylene	550		ug/kg	150	22.	1
Fluorene	66	J	ug/kg	190	18.	1
Phenanthrene	1000		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	150		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	580		ug/kg	150	26.	1
Pyrene	1600		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	430	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	40	J	ug/kg	190	18.	1
2-Methylnaphthalene	35	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	57.	1
Carbazole	100	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		25-120
Phenol-d6	55		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	56		30-120
2,4,6-Tribromophenol	51		10-136
4-Terphenyl-d14	43		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 04:36
 Analyst: EK
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	38	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1300		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	37	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	700		ug/kg	110	21.	1
Benzo(a)pyrene	590		ug/kg	150	46.	1
Benzo(b)fluoranthene	830		ug/kg	110	32.	1
Benzo(k)fluoranthene	260		ug/kg	110	30.	1
Chrysene	670		ug/kg	110	20.	1
Acenaphthylene	340		ug/kg	150	29.	1
Anthracene	240		ug/kg	110	37.	1
Benzo(ghi)perylene	410		ug/kg	150	22.	1
Fluorene	55	J	ug/kg	190	18.	1
Phenanthrene	770		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	100	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	420		ug/kg	150	26.	1
Pyrene	1100		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	29	J	ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
Client ID: RB08_10-12
Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	82	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		25-120
Phenol-d6	58		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	58		10-136
4-Terphenyl-d14	42		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/03/19 02:37
 Analyst: EK
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	62	J	ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	1100		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	76	J	ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	510		ug/kg	120	22.	1
Benzo(a)pyrene	500		ug/kg	160	48.	1
Benzo(b)fluoranthene	590		ug/kg	120	33.	1
Benzo(k)fluoranthene	190		ug/kg	120	32.	1
Chrysene	480		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	150		ug/kg	120	38.	1
Benzo(ghi)perylene	340		ug/kg	160	23.	1
Fluorene	55	J	ug/kg	200	19.	1
Phenanthrene	530		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	74	J	ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	330		ug/kg	160	27.	1
Pyrene	990		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	39	J	ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	95.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	51	J	ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	58		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/02/19 21:03
 Analyst: EK
 Percent Solids: 68%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	190	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	240	27.	1
Hexachlorobenzene	ND		ug/kg	140	27.	1
Bis(2-chloroethyl)ether	ND		ug/kg	220	32.	1
2-Chloronaphthalene	ND		ug/kg	240	24.	1
1,2-Dichlorobenzene	ND		ug/kg	240	43.	1
1,3-Dichlorobenzene	ND		ug/kg	240	41.	1
1,4-Dichlorobenzene	ND		ug/kg	240	42.	1
3,3'-Dichlorobenzidine	ND		ug/kg	240	64.	1
2,4-Dinitrotoluene	ND		ug/kg	240	48.	1
2,6-Dinitrotoluene	ND		ug/kg	240	41.	1
Fluoranthene	ND		ug/kg	140	28.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	240	26.	1
4-Bromophenyl phenyl ether	ND		ug/kg	240	36.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	290	41.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	260	24.	1
Hexachlorobutadiene	ND		ug/kg	240	35.	1
Hexachlorocyclopentadiene	ND		ug/kg	680	220	1
Hexachloroethane	ND		ug/kg	190	39.	1
Isophorone	ND		ug/kg	220	31.	1
Naphthalene	ND		ug/kg	240	29.	1
Nitrobenzene	ND		ug/kg	220	35.	1
NDPA/DPA	ND		ug/kg	190	27.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	240	37.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	240	83.	1
Butyl benzyl phthalate	ND		ug/kg	240	60.	1
Di-n-butylphthalate	ND		ug/kg	240	45.	1
Di-n-octylphthalate	ND		ug/kg	240	81.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-07

Date Collected: 12/27/18 13:00

Client ID: RB08_14-16

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	240	22.	1
Dimethyl phthalate	ND		ug/kg	240	50.	1
Benzo(a)anthracene	ND		ug/kg	140	27.	1
Benzo(a)pyrene	ND		ug/kg	190	58.	1
Benzo(b)fluoranthene	ND		ug/kg	140	40.	1
Benzo(k)fluoranthene	ND		ug/kg	140	38.	1
Chrysene	ND		ug/kg	140	25.	1
Acenaphthylene	ND		ug/kg	190	37.	1
Anthracene	ND		ug/kg	140	47.	1
Benzo(ghi)perylene	ND		ug/kg	190	28.	1
Fluorene	ND		ug/kg	240	23.	1
Phenanthrene	ND		ug/kg	140	29.	1
Dibenzo(a,h)anthracene	ND		ug/kg	140	28.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	190	33.	1
Pyrene	29	J	ug/kg	140	24.	1
Biphenyl	ND		ug/kg	550	56.	1
4-Chloroaniline	ND		ug/kg	240	44.	1
2-Nitroaniline	ND		ug/kg	240	46.	1
3-Nitroaniline	ND		ug/kg	240	45.	1
4-Nitroaniline	ND		ug/kg	240	99.	1
Dibenzofuran	ND		ug/kg	240	23.	1
2-Methylnaphthalene	ND		ug/kg	290	29.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	25.	1
Acetophenone	ND		ug/kg	240	30.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	45.	1
p-Chloro-m-cresol	ND		ug/kg	240	36.	1
2-Chlorophenol	ND		ug/kg	240	28.	1
2,4-Dichlorophenol	ND		ug/kg	220	38.	1
2,4-Dimethylphenol	ND		ug/kg	240	79.	1
2-Nitrophenol	ND		ug/kg	520	90.	1
4-Nitrophenol	ND		ug/kg	340	98.	1
2,4-Dinitrophenol	ND		ug/kg	1200	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	620	120	1
Pentachlorophenol	ND		ug/kg	190	53.	1
Phenol	ND		ug/kg	240	36.	1
2-Methylphenol	ND		ug/kg	240	37.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	340	38.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	240	46.	1
Benzoic Acid	ND		ug/kg	780	240	1
Benzyl Alcohol	ND		ug/kg	240	73.	1
Carbazole	ND		ug/kg	240	23.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		25-120
Phenol-d6	61		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	65		10-136
4-Terphenyl-d14	62		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/02/19 20:39
 Analyst: EK
 Percent Solids: 72%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	180	23.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	26.	1
Hexachlorobenzene	ND		ug/kg	130	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1
2-Chloronaphthalene	ND		ug/kg	220	22.	1
1,2-Dichlorobenzene	ND		ug/kg	220	40.	1
1,3-Dichlorobenzene	ND		ug/kg	220	38.	1
1,4-Dichlorobenzene	ND		ug/kg	220	39.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	60.	1
2,4-Dinitrotoluene	ND		ug/kg	220	45.	1
2,6-Dinitrotoluene	ND		ug/kg	220	38.	1
Fluoranthene	ND		ug/kg	130	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	38.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1
Hexachlorobutadiene	ND		ug/kg	220	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	640	200	1
Hexachloroethane	ND		ug/kg	180	36.	1
Isophorone	ND		ug/kg	200	29.	1
Naphthalene	ND		ug/kg	220	27.	1
Nitrobenzene	ND		ug/kg	200	33.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	35.	1
Bis(2-ethylhexyl)phthalate	100	J	ug/kg	220	78.	1
Butyl benzyl phthalate	ND		ug/kg	220	56.	1
Di-n-butylphthalate	ND		ug/kg	220	42.	1
Di-n-octylphthalate	ND		ug/kg	220	76.	1

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	220	21.	1
Dimethyl phthalate	ND		ug/kg	220	47.	1
Benzo(a)anthracene	ND		ug/kg	130	25.	1
Benzo(a)pyrene	ND		ug/kg	180	55.	1
Benzo(b)fluoranthene	ND		ug/kg	130	38.	1
Benzo(k)fluoranthene	ND		ug/kg	130	36.	1
Chrysene	ND		ug/kg	130	23.	1
Acenaphthylene	ND		ug/kg	180	35.	1
Anthracene	ND		ug/kg	130	44.	1
Benzo(ghi)perylene	ND		ug/kg	180	26.	1
Fluorene	ND		ug/kg	220	22.	1
Phenanthrene	ND		ug/kg	130	27.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	26.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	180	31.	1
Pyrene	23	J	ug/kg	130	22.	1
Biphenyl	ND		ug/kg	510	52.	1
4-Chloroaniline	ND		ug/kg	220	41.	1
2-Nitroaniline	ND		ug/kg	220	43.	1
3-Nitroaniline	ND		ug/kg	220	42.	1
4-Nitroaniline	ND		ug/kg	220	93.	1
Dibenzofuran	ND		ug/kg	220	21.	1
2-Methylnaphthalene	ND		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
Acetophenone	ND		ug/kg	220	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	42.	1
p-Chloro-m-cresol	ND		ug/kg	220	33.	1
2-Chlorophenol	ND		ug/kg	220	26.	1
2,4-Dichlorophenol	ND		ug/kg	200	36.	1
2,4-Dimethylphenol	ND		ug/kg	220	74.	1
2-Nitrophenol	ND		ug/kg	480	84.	1
4-Nitrophenol	ND		ug/kg	310	92.	1
2,4-Dinitrophenol	ND		ug/kg	1100	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	580	110	1
Pentachlorophenol	ND		ug/kg	180	49.	1
Phenol	ND		ug/kg	220	34.	1
2-Methylphenol	ND		ug/kg	220	35.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	320	35.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
Client ID: SODUP02_122718
Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	220	43.	1
Benzoic Acid	ND		ug/kg	730	230	1
Benzyl Alcohol	ND		ug/kg	220	69.	1
Carbazole	ND		ug/kg	220	22.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		25-120
Phenol-d6	64		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	67		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09 D
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/07/19 03:57
 Analyst: EK
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1300		ug/kg	750	97.	5
1,2,4-Trichlorobenzene	ND		ug/kg	940	110	5
Hexachlorobenzene	ND		ug/kg	560	100	5
Bis(2-chloroethyl)ether	ND		ug/kg	840	130	5
2-Chloronaphthalene	ND		ug/kg	940	93.	5
1,2-Dichlorobenzene	ND		ug/kg	940	170	5
1,3-Dichlorobenzene	ND		ug/kg	940	160	5
1,4-Dichlorobenzene	ND		ug/kg	940	160	5
3,3'-Dichlorobenzidine	ND		ug/kg	940	250	5
2,4-Dinitrotoluene	ND		ug/kg	940	190	5
2,6-Dinitrotoluene	ND		ug/kg	940	160	5
Fluoranthene	4900		ug/kg	560	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	940	100	5
4-Bromophenyl phenyl ether	ND		ug/kg	940	140	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	160	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1000	94.	5
Hexachlorobutadiene	ND		ug/kg	940	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2700	850	5
Hexachloroethane	ND		ug/kg	750	150	5
Isophorone	ND		ug/kg	840	120	5
Naphthalene	1800		ug/kg	940	110	5
Nitrobenzene	ND		ug/kg	840	140	5
NDPA/DPA	ND		ug/kg	750	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	940	140	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	940	320	5
Butyl benzyl phthalate	ND		ug/kg	940	240	5
Di-n-butylphthalate	ND		ug/kg	940	180	5
Di-n-octylphthalate	ND		ug/kg	940	320	5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-09 D

Date Collected: 12/27/18 09:35

Client ID: RB01_9-11

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	940	87.	5
Dimethyl phthalate	ND		ug/kg	940	200	5
Benzo(a)anthracene	3700		ug/kg	560	100	5
Benzo(a)pyrene	4700		ug/kg	750	230	5
Benzo(b)fluoranthene	3800		ug/kg	560	160	5
Benzo(k)fluoranthene	1100		ug/kg	560	150	5
Chrysene	3700		ug/kg	560	98.	5
Acenaphthylene	14000		ug/kg	750	140	5
Anthracene	1400		ug/kg	560	180	5
Benzo(ghi)perylene	4200		ug/kg	750	110	5
Fluorene	2100		ug/kg	940	91.	5
Phenanthrene	2400		ug/kg	560	110	5
Dibenzo(a,h)anthracene	680		ug/kg	560	110	5
Indeno(1,2,3-cd)pyrene	2600		ug/kg	750	130	5
Pyrene	9600		ug/kg	560	93.	5
Biphenyl	340	J	ug/kg	2100	220	5
4-Chloroaniline	ND		ug/kg	940	170	5
2-Nitroaniline	ND		ug/kg	940	180	5
3-Nitroaniline	ND		ug/kg	940	180	5
4-Nitroaniline	ND		ug/kg	940	390	5
Dibenzofuran	ND		ug/kg	940	89.	5
2-Methylnaphthalene	750	J	ug/kg	1100	110	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	940	98.	5
Acetophenone	ND		ug/kg	940	120	5
2,4,6-Trichlorophenol	ND		ug/kg	560	180	5
p-Chloro-m-cresol	ND		ug/kg	940	140	5
2-Chlorophenol	ND		ug/kg	940	110	5
2,4-Dichlorophenol	ND		ug/kg	840	150	5
2,4-Dimethylphenol	ND		ug/kg	940	310	5
2-Nitrophenol	ND		ug/kg	2000	350	5
4-Nitrophenol	ND		ug/kg	1300	380	5
2,4-Dinitrophenol	ND		ug/kg	4500	440	5
4,6-Dinitro-o-cresol	ND		ug/kg	2400	450	5
Pentachlorophenol	ND		ug/kg	750	210	5
Phenol	ND		ug/kg	940	140	5
2-Methylphenol	ND		ug/kg	940	140	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1400	150	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09 D
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	940	180	5
Benzoic Acid	ND		ug/kg	3000	950	5
Benzyl Alcohol	ND		ug/kg	940	290	5
Carbazole	390	J	ug/kg	940	91.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	98		25-120
Phenol-d6	93		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	92		30-120
2,4,6-Tribromophenol	105		10-136
4-Terphenyl-d14	81		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 05:11
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 12/29/18 12:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	32		10-120
4-Terphenyl-d14	64		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/05/19 14:24
 Analyst: DV

Extraction Method: EPA 3510C
 Extraction Date: 01/04/19 15:29

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.04	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.03	J	ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.03	J	ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	94		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 12/30/18 01:36
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1193399-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 12/30/18 01:36
 Analyst: RC

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1193399-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 12/30/18 01:36
 Analyst: RC

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 07:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1193399-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	72		10-136
4-Terphenyl-d14	69		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/19 00:52
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 12/29/18 12:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1193790-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/19 00:52
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 12/29/18 12:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1193790-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 01/04/19 00:52
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 12/29/18 12:39

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1193790-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	55		10-120
4-Terphenyl-d14	55		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/05/19 12:27
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/04/19 08:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG1194717-1					
Acenaphthene	0.02	J	ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	0.22		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	0.07	J	ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/05/19 12:27
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 01/04/19 08:03

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG1194717-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	94		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1193399-2 WG1193399-3								
Acenaphthene	66		65		31-137	2		50
1,2,4-Trichlorobenzene	83		78		38-107	6		50
Hexachlorobenzene	70		70		40-140	0		50
Bis(2-chloroethyl)ether	80		75		40-140	6		50
2-Chloronaphthalene	80		80		40-140	0		50
1,2-Dichlorobenzene	81		75		40-140	8		50
1,3-Dichlorobenzene	78		73		40-140	7		50
1,4-Dichlorobenzene	81		73		28-104	10		50
3,3'-Dichlorobenzidine	73		68		40-140	7		50
2,4-Dinitrotoluene	85		85		40-132	0		50
2,6-Dinitrotoluene	92		91		40-140	1		50
Fluoranthene	75		77		40-140	3		50
4-Chlorophenyl phenyl ether	68		66		40-140	3		50
4-Bromophenyl phenyl ether	70		68		40-140	3		50
Bis(2-chloroisopropyl)ether	73		67		40-140	9		50
Bis(2-chloroethoxy)methane	80		75		40-117	6		50
Hexachlorobutadiene	74		70		40-140	6		50
Hexachlorocyclopentadiene	70		67		40-140	4		50
Hexachloroethane	77		74		40-140	4		50
Isophorone	80		74		40-140	8		50
Naphthalene	78		75		40-140	4		50
Nitrobenzene	86		79		40-140	8		50
NDPA/DPA	70		68		36-157	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1193399-2 WG1193399-3								
n-Nitrosodi-n-propylamine	77		72		32-121	7		50
Bis(2-ethylhexyl)phthalate	89		90		40-140	1		50
Butyl benzyl phthalate	86		85		40-140	1		50
Di-n-butylphthalate	83		84		40-140	1		50
Di-n-octylphthalate	93		92		40-140	1		50
Diethyl phthalate	72		72		40-140	0		50
Dimethyl phthalate	80		79		40-140	1		50
Benzo(a)anthracene	71		71		40-140	0		50
Benzo(a)pyrene	83		84		40-140	1		50
Benzo(b)fluoranthene	83		81		40-140	2		50
Benzo(k)fluoranthene	77		82		40-140	6		50
Chrysene	74		76		40-140	3		50
Acenaphthylene	82		82		40-140	0		50
Anthracene	78		79		40-140	1		50
Benzo(ghi)perylene	78		77		40-140	1		50
Fluorene	72		73		40-140	1		50
Phenanthrene	73		76		40-140	4		50
Dibenzo(a,h)anthracene	75		76		40-140	1		50
Indeno(1,2,3-cd)pyrene	78		77		40-140	1		50
Pyrene	74		76		35-142	3		50
Biphenyl	83		81		54-104	2		50
4-Chloroaniline	58		57		40-140	2		50
2-Nitroaniline	97		96		47-134	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1193399-2 WG1193399-3								
3-Nitroaniline	68		71		26-129	4		50
4-Nitroaniline	75		74		41-125	1		50
Dibenzofuran	72		73		40-140	1		50
2-Methylnaphthalene	77		76		40-140	1		50
1,2,4,5-Tetrachlorobenzene	83		80		40-117	4		50
Acetophenone	85		79		14-144	7		50
2,4,6-Trichlorophenol	86		86		30-130	0		50
p-Chloro-m-cresol	83		82		26-103	1		50
2-Chlorophenol	91		83		25-102	9		50
2,4-Dichlorophenol	94		91		30-130	3		50
2,4-Dimethylphenol	91		87		30-130	4		50
2-Nitrophenol	105		100		30-130	5		50
4-Nitrophenol	86		84		11-114	2		50
2,4-Dinitrophenol	90		89		4-130	1		50
4,6-Dinitro-o-cresol	86		86		10-130	0		50
Pentachlorophenol	87		84		17-109	4		50
Phenol	82		75		26-90	9		50
2-Methylphenol	88		82		30-130.	7		50
3-Methylphenol/4-Methylphenol	95		89		30-130	7		50
2,4,5-Trichlorophenol	89		87		30-130	2		50
Benzoic Acid	56		57		10-110	2		50
Benzyl Alcohol	84		78		40-140	7		50
Carbazole	78		79		54-128	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1193399-2 WG1193399-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	91		82		25-120
Phenol-d6	88		83		10-120
Nitrobenzene-d5	90		83		23-120
2-Fluorobiphenyl	80		78		30-120
2,4,6-Tribromophenol	79		79		10-136
4-Terphenyl-d14	69		70		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1193790-2 WG1193790-3								
Acenaphthene	67		67		37-111	0		30
1,2,4-Trichlorobenzene	63		61		39-98	3		30
Hexachlorobenzene	63		65		40-140	3		30
Bis(2-chloroethyl)ether	73		69		40-140	6		30
2-Chloronaphthalene	65		63		40-140	3		30
1,2-Dichlorobenzene	65		60		40-140	8		30
1,3-Dichlorobenzene	61		58		40-140	5		30
1,4-Dichlorobenzene	62		61		36-97	2		30
3,3'-Dichlorobenzidine	40		35	Q	40-140	13		30
2,4-Dinitrotoluene	70		72		48-143	3		30
2,6-Dinitrotoluene	68		68		40-140	0		30
Fluoranthene	68		72		40-140	6		30
4-Chlorophenyl phenyl ether	67		67		40-140	0		30
4-Bromophenyl phenyl ether	68		69		40-140	1		30
Bis(2-chloroisopropyl)ether	85		83		40-140	2		30
Bis(2-chloroethoxy)methane	74		73		40-140	1		30
Hexachlorobutadiene	66		62		40-140	6		30
Hexachlorocyclopentadiene	60		59		40-140	2		30
Hexachloroethane	65		61		40-140	6		30
Isophorone	75		76		40-140	1		30
Naphthalene	66		64		40-140	3		30
Nitrobenzene	70		68		40-140	3		30
NDPA/DPA	64		65		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1193790-2 WG1193790-3								
n-Nitrosodi-n-propylamine	76		75		29-132	1		30
Bis(2-ethylhexyl)phthalate	93		91		40-140	2		30
Butyl benzyl phthalate	67		69		40-140	3		30
Di-n-butylphthalate	71		75		40-140	5		30
Di-n-octylphthalate	83		86		40-140	4		30
Diethyl phthalate	66		71		40-140	7		30
Dimethyl phthalate	66		66		40-140	0		30
Benzo(a)anthracene	73		74		40-140	1		30
Benzo(a)pyrene	77		77		40-140	0		30
Benzo(b)fluoranthene	76		78		40-140	3		30
Benzo(k)fluoranthene	76		76		40-140	0		30
Chrysene	76		78		40-140	3		30
Acenaphthylene	65		64		45-123	2		30
Anthracene	70		71		40-140	1		30
Benzo(ghi)perylene	73		77		40-140	5		30
Fluorene	66		66		40-140	0		30
Phenanthrene	68		69		40-140	1		30
Dibenzo(a,h)anthracene	72		75		40-140	4		30
Indeno(1,2,3-cd)pyrene	72		74		40-140	3		30
Pyrene	65		69		26-127	6		30
Biphenyl	66		65		40-140	2		30
4-Chloroaniline	44		38	Q	40-140	15		30
2-Nitroaniline	70		71		52-143	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1193790-2 WG1193790-3								
3-Nitroaniline	47		50		25-145	6		30
4-Nitroaniline	59		60		51-143	2		30
Dibenzofuran	67		67		40-140	0		30
2-Methylnaphthalene	68		65		40-140	5		30
1,2,4,5-Tetrachlorobenzene	64		61		2-134	5		30
Acetophenone	71		70		39-129	1		30
2,4,6-Trichlorophenol	63		65		30-130	3		30
p-Chloro-m-cresol	70		70		23-97	0		30
2-Chlorophenol	66		63		27-123	5		30
2,4-Dichlorophenol	65		64		30-130	2		30
2,4-Dimethylphenol	36		29	Q	30-130	22		30
2-Nitrophenol	68		65		30-130	5		30
4-Nitrophenol	65		71		10-80	9		30
2,4-Dinitrophenol	79		82		20-130	4		30
4,6-Dinitro-o-cresol	70		71		20-164	1		30
Pentachlorophenol	67		76		9-103	13		30
Phenol	55		53		12-110	4		30
2-Methylphenol	63		59		30-130	7		30
3-Methylphenol/4-Methylphenol	66		63		30-130	5		30
2,4,5-Trichlorophenol	65		64		30-130	2		30
Benzoic Acid	65		66		10-164	2		30
Benzyl Alcohol	71		68		26-116	4		30
Carbazole	67		70		55-144	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1193790-2 WG1193790-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	61		59		21-120
Phenol-d6	53		53		10-120
Nitrobenzene-d5	72		70		23-120
2-Fluorobiphenyl	62		62		15-120
2,4,6-Tribromophenol	60		64		10-120
4-Terphenyl-d14	58		62		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG1194717-2 WG1194717-3								
Acenaphthene	82		87		40-140	6		40
2-Chloronaphthalene	80		83		40-140	4		40
Fluoranthene	99		99		40-140	0		40
Hexachlorobutadiene	73		79		40-140	8		40
Naphthalene	75		82		40-140	9		40
Benzo(a)anthracene	95		101		40-140	6		40
Benzo(a)pyrene	101		107		40-140	6		40
Benzo(b)fluoranthene	97		103		40-140	6		40
Benzo(k)fluoranthene	98		106		40-140	8		40
Chrysene	85		91		40-140	7		40
Acenaphthylene	92		96		40-140	4		40
Anthracene	91		96		40-140	5		40
Benzo(ghi)perylene	92		95		40-140	3		40
Fluorene	92		96		40-140	4		40
Phenanthrene	84		88		40-140	5		40
Dibenzo(a,h)anthracene	98		102		40-140	4		40
Indeno(1,2,3-cd)pyrene	99		103		40-140	4		40
Pyrene	100		100		40-140	0		40
2-Methylnaphthalene	79		84		40-140	6		40
Pentachlorophenol	99		106		40-140	7		40
Hexachlorobenzene	84		90		40-140	7		40
Hexachloroethane	72		81		40-140	12		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG1194717-2 WG1194717-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	66		68		21-120
Phenol-d6	56		58		10-120
Nitrobenzene-d5	90		96		23-120
2-Fluorobiphenyl	80		81		15-120
2,4,6-Tribromophenol	109		100		10-120
4-Terphenyl-d14	91		88		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193399-6 WG1193399-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
Acenaphthene	140J	2170	1300	60		1200	55		31-137	8		50
1,2,4-Trichlorobenzene	ND	2170	1500	69		1400	64		38-107	7		50
Hexachlorobenzene	ND	2170	1400	64		1300	59		40-140	7		50
Bis(2-chloroethyl)ether	ND	2170	1400	64		1300	59		40-140	7		50
2-Chloronaphthalene	ND	2170	1500	69		1400	64		40-140	7		50
1,2-Dichlorobenzene	ND	2170	1400	64		1300	59		40-140	7		50
1,3-Dichlorobenzene	ND	2170	1300	60		1300	59		40-140	0		50
1,4-Dichlorobenzene	ND	2170	1400	64		1300	59		28-104	7		50
3,3'-Dichlorobenzidine	ND	2170	1200	55		1200	55		40-140	0		50
2,4-Dinitrotoluene	ND	2170	1200	55		1200	55		40-132	0		50
2,6-Dinitrotoluene	ND	2170	1400	64		1400	64		40-140	0		50
Fluoranthene	270	2170	1500	57		1400	52		40-140	7		50
4-Chlorophenyl phenyl ether	ND	2170	1300	60		1200	55		40-140	8		50
4-Bromophenyl phenyl ether	ND	2170	1400	64		1300	59		40-140	7		50
Bis(2-chloroisopropyl)ether	ND	2170	1400	64		1300	59		40-140	7		50
Bis(2-chloroethoxy)methane	ND	2170	1500	69		1400	64		40-117	7		50
Hexachlorobutadiene	ND	2170	1500	69		1400	64		40-140	7		50
Hexachlorocyclopentadiene	ND	2170	980	45		920	42		40-140	6		50
Hexachloroethane	ND	2170	1300	60		1200	55		40-140	8		50
Isophorone	ND	2170	1500	69		1400	64		40-140	7		50
Naphthalene	230J	2170	1500	69		1400	64		40-140	7		50
Nitrobenzene	ND	2170	1400	64		1300	59		40-140	7		50
NDPA/DPA	ND	2170	1300	60		1200	55		36-157	8		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193399-6 WG1193399-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
n-Nitrosodi-n-propylamine	ND	2170	1500	69		1400	64		32-121	7		50
Bis(2-ethylhexyl)phthalate	ND	2170	1400	64		1300	59		40-140	7		50
Butyl benzyl phthalate	ND	2170	1400	64		1300	59		40-140	7		50
Di-n-butylphthalate	ND	2170	1400	64		1400	64		40-140	0		50
Di-n-octylphthalate	ND	2170	1400	64		1300	59		40-140	7		50
Diethyl phthalate	ND	2170	1200	55		1200	55		40-140	0		50
Dimethyl phthalate	ND	2170	1600	74		1500	69		40-140	6		50
Benzo(a)anthracene	130J	2170	1300	60		1300	59		40-140	0		50
Benzo(a)pyrene	120J	2170	1400	64		1300	59		40-140	7		50
Benzo(b)fluoranthene	110J	2170	1300	60		1300	59		40-140	0		50
Benzo(k)fluoranthene	ND	2170	1400	64		1400	64		40-140	0		50
Chrysene	120J	2170	1300	60		1300	59		40-140	0		50
Acenaphthylene	96J	2170	1600	74		1500	69		40-140	6		50
Anthracene	74J	2170	1400	64		1300	59		40-140	7		50
Benzo(ghi)perylene	73J	2170	1300	60		1300	59		40-140	0		50
Fluorene	56J	2170	1300	60		1200	55		40-140	8		50
Phenanthrene	160	2170	1400	64		1300	59		40-140	7		50
Dibenzo(a,h)anthracene	ND	2170	1400	64		1300	59		40-140	7		50
Indeno(1,2,3-cd)pyrene	55J	2170	1300	60		1300	59		40-140	0		50
Pyrene	390	2170	1500	51		1400	46		35-142	7		50
Biphenyl	ND	2170	1500	69		1400	64		54-104	7		50
4-Chloroaniline	ND	2170	930	43		930	43		40-140	0		50
2-Nitroaniline	ND	2170	1600	74		1500	69		47-134	6		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193399-6 WG1193399-7 QC Sample: L1853234-03 Client ID: RB01_25-27												
3-Nitroaniline	ND	2170	940	43		940	43		26-129	0		50
4-Nitroaniline	ND	2170	1200	55		1100	50		41-125	9		50
Dibenzofuran	29J	2170	1200	55		1200	55		40-140	0		50
2-Methylnaphthalene	38J	2170	1500	69		1400	64		40-140	7		50
1,2,4,5-Tetrachlorobenzene	ND	2170	1600	74		1500	69		40-117	6		50
Acetophenone	ND	2170	1500	69		1400	64		14-144	7		50
2,4,6-Trichlorophenol	ND	2170	1600	74		1500	69		30-130	6		50
p-Chloro-m-cresol	ND	2170	1600	74		1500	69		26-103	6		50
2-Chlorophenol	ND	2170	1500	69		1400	64		25-102	7		50
2,4-Dichlorophenol	ND	2170	1700	78		1500	69		30-130	13		50
2,4-Dimethylphenol	ND	2170	1700	78		1500	69		30-130	13		50
2-Nitrophenol	ND	2170	1400	64		1300	59		30-130	7		50
4-Nitrophenol	ND	2170	1000	46		910	42		11-114	9		50
2,4-Dinitrophenol	ND	2170	ND	0	Q	ND	0	Q	4-130	NC		50
4,6-Dinitro-o-cresol	ND	2170	200J	9	Q	140J	6	Q	10-130	35		50
Pentachlorophenol	ND	2170	1300	60		1200	55		17-109	8		50
Phenol	ND	2170	1400	64		1400	64		26-90	0		50
2-Methylphenol	ND	2170	1500	69		1400	64		30-130	7		50
3-Methylphenol/4-Methylphenol	ND	2170	1500	69		1400	64		30-130	7		50
2,4,5-Trichlorophenol	ND	2170	1700	78		1500	69		30-130	13		50
Benzoic Acid	ND	2170	ND	0	Q	ND	0	Q	10-110	NC		50
Benzyl Alcohol	ND	2170	1600	74		1400	64		40-140	13		50
Carbazole	ND	2170	1400	64		1300	59		54-128	7		50

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193399-6 WG1193399-7 QC Sample: L1853234-03 Client ID: RB01_25-27

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	69		62		10-136
2-Fluorobiphenyl	71		68		30-120
2-Fluorophenol	65		60		25-120
4-Terphenyl-d14	66		62		18-120
Nitrobenzene-d5	64		61		23-120
Phenol-d6	68		64		10-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 19:44
 Analyst: WR
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.5	3.42	1	A
Aroclor 1221	ND		ug/kg	38.5	3.86	1	A
Aroclor 1232	ND		ug/kg	38.5	8.17	1	A
Aroclor 1242	ND		ug/kg	38.5	5.20	1	A
Aroclor 1248	ND		ug/kg	38.5	5.78	1	A
Aroclor 1254	ND		ug/kg	38.5	4.22	1	A
Aroclor 1260	ND		ug/kg	38.5	7.12	1	A
Aroclor 1262	ND		ug/kg	38.5	4.90	1	A
Aroclor 1268	ND		ug/kg	38.5	3.99	1	A
PCBs, Total	ND		ug/kg	38.5	3.42	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 19:56
 Analyst: WR
 Percent Solids: 63%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	51.1	4.54	1	A
Aroclor 1221	ND		ug/kg	51.1	5.12	1	A
Aroclor 1232	ND		ug/kg	51.1	10.8	1	A
Aroclor 1242	ND		ug/kg	51.1	6.89	1	A
Aroclor 1248	ND		ug/kg	51.1	7.67	1	A
Aroclor 1254	ND		ug/kg	51.1	5.59	1	A
Aroclor 1260	ND		ug/kg	51.1	9.45	1	A
Aroclor 1262	ND		ug/kg	51.1	6.49	1	A
Aroclor 1268	ND		ug/kg	51.1	5.30	1	A
PCBs, Total	ND		ug/kg	51.1	4.54	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	44		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	47		30-150	B
Decachlorobiphenyl	47		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 20:09
 Analyst: WR
 Percent Solids: 60%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	54.3	4.82	1	A
Aroclor 1221	ND		ug/kg	54.3	5.44	1	A
Aroclor 1232	ND		ug/kg	54.3	11.5	1	A
Aroclor 1242	ND		ug/kg	54.3	7.32	1	A
Aroclor 1248	ND		ug/kg	54.3	8.14	1	A
Aroclor 1254	ND		ug/kg	54.3	5.94	1	A
Aroclor 1260	ND		ug/kg	54.3	10.0	1	A
Aroclor 1262	ND		ug/kg	54.3	6.89	1	A
Aroclor 1268	ND		ug/kg	54.3	5.62	1	A
PCBs, Total	ND		ug/kg	54.3	4.82	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
Client ID: RB08_0-2
Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/02/19 20:46
Analyst: WR
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 12/28/18 08:40
Cleanup Method: EPA 3665A
Cleanup Date: 12/28/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.1	3.21	1	A
Aroclor 1221	ND		ug/kg	36.1	3.62	1	A
Aroclor 1232	ND		ug/kg	36.1	7.66	1	A
Aroclor 1242	ND		ug/kg	36.1	4.87	1	A
Aroclor 1248	ND		ug/kg	36.1	5.42	1	A
Aroclor 1254	ND		ug/kg	36.1	3.95	1	A
Aroclor 1260	40.7		ug/kg	36.1	6.68	1	B
Aroclor 1262	ND		ug/kg	36.1	4.59	1	A
Aroclor 1268	ND		ug/kg	36.1	3.74	1	A
PCBs, Total	40.7		ug/kg	36.1	3.21	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
Client ID: RB08_10-12
Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/02/19 20:59
Analyst: WR
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 12/28/18 08:40
Cleanup Method: EPA 3665A
Cleanup Date: 12/28/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.5	3.33	1	A
Aroclor 1221	ND		ug/kg	37.5	3.76	1	A
Aroclor 1232	ND		ug/kg	37.5	7.95	1	A
Aroclor 1242	ND		ug/kg	37.5	5.05	1	A
Aroclor 1248	ND		ug/kg	37.5	5.62	1	A
Aroclor 1254	ND		ug/kg	37.5	4.10	1	A
Aroclor 1260	ND		ug/kg	37.5	6.93	1	A
Aroclor 1262	ND		ug/kg	37.5	4.76	1	A
Aroclor 1268	ND		ug/kg	37.5	3.88	1	A
PCBs, Total	ND		ug/kg	37.5	3.33	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 21:11
 Analyst: WR
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.6	3.34	1	A
Aroclor 1221	ND		ug/kg	37.6	3.77	1	A
Aroclor 1232	ND		ug/kg	37.6	7.98	1	A
Aroclor 1242	ND		ug/kg	37.6	5.07	1	A
Aroclor 1248	ND		ug/kg	37.6	5.65	1	A
Aroclor 1254	ND		ug/kg	37.6	4.12	1	A
Aroclor 1260	ND		ug/kg	37.6	6.96	1	A
Aroclor 1262	ND		ug/kg	37.6	4.78	1	A
Aroclor 1268	ND		ug/kg	37.6	3.90	1	A
PCBs, Total	ND		ug/kg	37.6	3.34	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	44		30-150	A
Decachlorobiphenyl	36		30-150	A
2,4,5,6-Tetrachloro-m-xylene	45		30-150	B
Decachlorobiphenyl	41		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 21:24
 Analyst: WR
 Percent Solids: 68%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	47.4	4.21	1	A
Aroclor 1221	ND		ug/kg	47.4	4.75	1	A
Aroclor 1232	ND		ug/kg	47.4	10.0	1	A
Aroclor 1242	ND		ug/kg	47.4	6.39	1	A
Aroclor 1248	ND		ug/kg	47.4	7.11	1	A
Aroclor 1254	ND		ug/kg	47.4	5.18	1	A
Aroclor 1260	ND		ug/kg	47.4	8.76	1	A
Aroclor 1262	ND		ug/kg	47.4	6.02	1	A
Aroclor 1268	ND		ug/kg	47.4	4.91	1	A
PCBs, Total	ND		ug/kg	47.4	4.21	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
Client ID: SODUP02_122718
Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
Date Received: 12/27/18
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/02/19 21:36
Analyst: WR
Percent Solids: 72%

Extraction Method: EPA 3546
Extraction Date: 12/28/18 08:40
Cleanup Method: EPA 3665A
Cleanup Date: 12/28/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	44.6	3.96	1	A
Aroclor 1221	ND		ug/kg	44.6	4.47	1	A
Aroclor 1232	ND		ug/kg	44.6	9.46	1	A
Aroclor 1242	ND		ug/kg	44.6	6.01	1	A
Aroclor 1248	ND		ug/kg	44.6	6.69	1	A
Aroclor 1254	ND		ug/kg	44.6	4.88	1	A
Aroclor 1260	ND		ug/kg	44.6	8.24	1	A
Aroclor 1262	ND		ug/kg	44.6	5.67	1	A
Aroclor 1268	ND		ug/kg	44.6	4.62	1	A
PCBs, Total	ND		ug/kg	44.6	3.96	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/02/19 22:22
 Analyst: WR
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 08:40
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/28/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.2	3.39	1	A
Aroclor 1221	ND		ug/kg	38.2	3.83	1	A
Aroclor 1232	ND		ug/kg	38.2	8.10	1	A
Aroclor 1242	ND		ug/kg	38.2	5.15	1	A
Aroclor 1248	ND		ug/kg	38.2	5.73	1	A
Aroclor 1254	ND		ug/kg	38.2	4.18	1	A
Aroclor 1260	ND		ug/kg	38.2	7.06	1	A
Aroclor 1262	ND		ug/kg	38.2	4.85	1	A
Aroclor 1268	ND		ug/kg	38.2	3.96	1	A
PCBs, Total	ND		ug/kg	38.2	3.39	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 12/30/18 22:05
 Analyst: AWS

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 07:15
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/30/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/30/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 12/30/18 23:40
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 12/28/18 08:40
Cleanup Method: EPA 3665A
Cleanup Date: 12/28/18
Cleanup Method: EPA 3660B
Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-09 Batch: WG1193423-1						
Aroclor 1016	ND		ug/kg	31.6	2.80	A
Aroclor 1221	ND		ug/kg	31.6	3.16	A
Aroclor 1232	ND		ug/kg	31.6	6.69	A
Aroclor 1242	ND		ug/kg	31.6	4.26	A
Aroclor 1248	ND		ug/kg	31.6	4.73	A
Aroclor 1254	ND		ug/kg	31.6	3.45	A
Aroclor 1260	ND		ug/kg	31.6	5.83	A
Aroclor 1262	ND		ug/kg	31.6	4.01	A
Aroclor 1268	ND		ug/kg	31.6	3.27	A
PCBs, Total	ND		ug/kg	31.6	2.80	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 12/30/18 22:19
 Analyst: AWS

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 07:15
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/30/18
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/30/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 11 Batch: WG1193825-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	85		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1193423-2 WG1193423-3									
Aroclor 1016	65		71		40-140	9		50	A
Aroclor 1260	54		59		40-140	9		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		73		30-150	A
Decachlorobiphenyl	61		64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		73		30-150	B
Decachlorobiphenyl	64		66		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 11 Batch: WG1193825-2 WG1193825-3									
Aroclor 1016	74		72		40-140	2		50	A
Aroclor 1260	76		77		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		78		30-150	A
Decachlorobiphenyl	80		81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		82		30-150	B
Decachlorobiphenyl	86		87		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193423-4 WG1193423-5 QC Sample: L1853234-03 Client ID: RB01_25-27													
Aroclor 1016	ND	335	303	91		337	101		40-140	11		50	A
Aroclor 1260	ND	335	194	58		185	56		40-140	5		50	A

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	53		51		30-150	A
Decachlorobiphenyl	53		55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		60		30-150	B
Decachlorobiphenyl	57		60		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 11:22
 Analyst: BM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.90	0.371	1	A
Lindane	ND		ug/kg	0.790	0.353	1	A
Alpha-BHC	ND		ug/kg	0.790	0.224	1	A
Beta-BHC	ND		ug/kg	1.90	0.719	1	A
Heptachlor	ND		ug/kg	0.948	0.425	1	A
Aldrin	ND		ug/kg	1.90	0.668	1	A
Heptachlor epoxide	ND		ug/kg	3.56	1.07	1	A
Endrin	ND		ug/kg	0.790	0.324	1	A
Endrin aldehyde	ND		ug/kg	2.37	0.830	1	A
Endrin ketone	ND		ug/kg	1.90	0.488	1	A
Dieldrin	ND		ug/kg	1.18	0.593	1	A
4,4'-DDE	ND		ug/kg	1.90	0.438	1	A
4,4'-DDD	ND		ug/kg	1.90	0.676	1	A
4,4'-DDT	ND		ug/kg	3.56	1.52	1	A
Endosulfan I	ND		ug/kg	1.90	0.448	1	A
Endosulfan II	1.69	JIP	ug/kg	1.90	0.634	1	A
Endosulfan sulfate	ND		ug/kg	0.790	0.376	1	A
Methoxychlor	ND		ug/kg	3.56	1.11	1	A
Toxaphene	ND		ug/kg	35.6	9.96	1	A
cis-Chlordane	ND		ug/kg	2.37	0.661	1	A
trans-Chlordane	ND		ug/kg	2.37	0.626	1	A
Chlordane	ND		ug/kg	15.4	6.28	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	102		30-150	B
2,4,5,6-Tetrachloro-m-xylene	183	Q	30-150	A
Decachlorobiphenyl	114		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01
 Client ID: RB01_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:30
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 02:56
 Analyst: DGM
 Percent Solids: 83%
 Methylation Date: 12/29/18 17:43

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	199	12.5	1	B
2,4,5-T	ND		ug/kg	199	6.16	1	B
2,4,5-TP (Silvex)	ND		ug/kg	199	5.29	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	131		30-150	A
DCAA	122		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 03:14
 Analyst: DGM
 Percent Solids: 63%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	264	16.6	1	B
2,4,5-T	ND		ug/kg	264	8.18	1	B
2,4,5-TP (Silvex)	ND		ug/kg	264	7.02	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	124		30-150	A
DCAA	109		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02 D
 Client ID: RB01_14-15
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:40
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 11:11
 Analyst: KEG
 Percent Solids: 63%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	24.5	4.81	10	A
Lindane	ND		ug/kg	10.2	4.57	10	A
Alpha-BHC	ND		ug/kg	10.2	2.90	10	A
Beta-BHC	ND		ug/kg	24.5	9.31	10	A
Heptachlor	ND		ug/kg	12.3	5.50	10	A
Aldrin	ND		ug/kg	24.5	8.64	10	A
Heptachlor epoxide	ND		ug/kg	46.0	13.8	10	A
Endrin	ND		ug/kg	10.2	4.19	10	A
Endrin aldehyde	ND		ug/kg	30.7	10.7	10	A
Endrin ketone	ND		ug/kg	24.5	6.32	10	A
Dieldrin	ND	IP	ug/kg	15.3	7.67	10	A
4,4'-DDE	ND		ug/kg	24.5	5.68	10	A
4,4'-DDD	ND		ug/kg	24.5	8.75	10	A
4,4'-DDT	ND		ug/kg	46.0	19.7	10	A
Endosulfan I	ND		ug/kg	24.5	5.80	10	A
Endosulfan II	ND		ug/kg	24.5	8.20	10	A
Endosulfan sulfate	ND		ug/kg	10.2	4.87	10	A
Methoxychlor	ND		ug/kg	46.0	14.3	10	A
Toxaphene	ND		ug/kg	460	129.	10	A
cis-Chlordane	ND		ug/kg	30.7	8.55	10	A
trans-Chlordane	ND		ug/kg	30.7	8.10	10	A
Chlordane	ND		ug/kg	199	81.3	10	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-02 D

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	130		30-150	B
2,4,5,6-Tetrachloro-m-xylene	7680	Q	30-150	A
Decachlorobiphenyl	242	Q	30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 12/29/18 15:14
 Analyst: BM
 Percent Solids: 60%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.50	0.490	1	A
Lindane	ND		ug/kg	1.04	0.466	1	A
Alpha-BHC	ND		ug/kg	1.04	0.296	1	A
Beta-BHC	ND		ug/kg	2.50	0.948	1	A
Heptachlor	ND		ug/kg	1.25	0.560	1	A
Aldrin	ND		ug/kg	2.50	0.880	1	A
Heptachlor epoxide	ND		ug/kg	4.69	1.41	1	A
Endrin	ND		ug/kg	1.04	0.427	1	A
Endrin aldehyde	ND		ug/kg	3.12	1.09	1	A
Endrin ketone	ND		ug/kg	2.50	0.644	1	A
Dieldrin	ND		ug/kg	1.56	0.781	1	A
4,4'-DDE	ND		ug/kg	2.50	0.578	1	A
4,4'-DDD	ND		ug/kg	2.50	0.892	1	A
4,4'-DDT	2.79	J	ug/kg	4.69	2.01	1	A
Endosulfan I	ND		ug/kg	2.50	0.591	1	A
Endosulfan II	ND		ug/kg	2.50	0.835	1	A
Endosulfan sulfate	ND		ug/kg	1.04	0.496	1	A
Methoxychlor	ND		ug/kg	4.69	1.46	1	A
Toxaphene	ND		ug/kg	46.9	13.1	1	A
cis-Chlordane	ND		ug/kg	3.12	0.871	1	A
trans-Chlordane	ND		ug/kg	3.12	0.825	1	A
Chlordane	ND		ug/kg	20.3	8.28	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-03

Date Collected: 12/27/18 09:45

Client ID: RB01_25-27

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	73		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1270	Q	30-150	A
Decachlorobiphenyl	60		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-03
 Client ID: RB01_25-27
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 01:59
 Analyst: DGM
 Percent Solids: 60%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	272	17.1	1	B
2,4,5-T	ND		ug/kg	272	8.42	1	B
2,4,5-TP (Silvex)	ND		ug/kg	272	7.23	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	122		30-150	A
DCAA	102		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 11:48
 Analyst: BM
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.348	1	A
Lindane	ND		ug/kg	0.740	0.331	1	A
Alpha-BHC	ND		ug/kg	0.740	0.210	1	A
Beta-BHC	ND		ug/kg	1.78	0.673	1	A
Heptachlor	ND		ug/kg	0.888	0.398	1	A
Aldrin	ND		ug/kg	1.78	0.625	1	A
Heptachlor epoxide	ND		ug/kg	3.33	0.999	1	A
Endrin	ND		ug/kg	0.740	0.303	1	A
Endrin aldehyde	ND		ug/kg	2.22	0.777	1	A
Endrin ketone	ND		ug/kg	1.78	0.457	1	A
Dieldrin	ND		ug/kg	1.11	0.555	1	A
4,4'-DDE	2.06	IP	ug/kg	1.78	0.411	1	A
4,4'-DDD	ND		ug/kg	1.78	0.633	1	A
4,4'-DDT	13.3	IP	ug/kg	3.33	1.43	1	A
Endosulfan I	ND		ug/kg	1.78	0.420	1	A
Endosulfan II	ND		ug/kg	1.78	0.593	1	A
Endosulfan sulfate	ND		ug/kg	0.740	0.352	1	A
Methoxychlor	ND		ug/kg	3.33	1.04	1	A
Toxaphene	ND		ug/kg	33.3	9.32	1	A
cis-Chlordane	2.38	IP	ug/kg	2.22	0.618	1	B
trans-Chlordane	ND		ug/kg	2.22	0.586	1	A
Chlordane	ND		ug/kg	14.4	5.88	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	110		30-150	B
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	75		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-04
 Client ID: RB08_0-2
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 03:33
 Analyst: DGM
 Percent Solids: 88%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	B
2,4,5-T	ND		ug/kg	184	5.71	1	B
2,4,5-TP (Silvex)	ND		ug/kg	184	4.90	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	123		30-150	A
DCAA	117		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 12:00
 Analyst: BM
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.342	1	A
Lindane	ND		ug/kg	0.727	0.325	1	A
Alpha-BHC	ND		ug/kg	0.727	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.662	1	A
Heptachlor	ND		ug/kg	0.872	0.391	1	A
Aldrin	ND		ug/kg	1.74	0.614	1	A
Heptachlor epoxide	ND		ug/kg	3.27	0.982	1	A
Endrin	ND		ug/kg	0.727	0.298	1	A
Endrin aldehyde	ND		ug/kg	2.18	0.763	1	A
Endrin ketone	ND		ug/kg	1.74	0.449	1	A
Dieldrin	ND		ug/kg	1.09	0.545	1	A
4,4'-DDE	ND		ug/kg	1.74	0.404	1	A
4,4'-DDD	ND		ug/kg	1.74	0.622	1	A
4,4'-DDT	3.66		ug/kg	3.27	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.412	1	A
Endosulfan II	ND		ug/kg	1.74	0.583	1	A
Endosulfan sulfate	ND		ug/kg	0.727	0.346	1	A
Methoxychlor	ND		ug/kg	3.27	1.02	1	A
Toxaphene	ND		ug/kg	32.7	9.16	1	A
cis-Chlordane	ND		ug/kg	2.18	0.608	1	A
trans-Chlordane	ND		ug/kg	2.18	0.576	1	A
Chlordane	ND		ug/kg	14.2	5.78	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-05
 Client ID: RB08_10-12
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:50
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 03:52
 Analyst: DGM
 Percent Solids: 87%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	188	11.8	1	B
2,4,5-T	ND		ug/kg	188	5.81	1	B
2,4,5-TP (Silvex)	ND		ug/kg	188	4.99	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	137		30-150	A
DCAA	110		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 12:13
 Analyst: BM
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.360	1	A
Lindane	ND		ug/kg	0.765	0.342	1	A
Alpha-BHC	ND		ug/kg	0.765	0.217	1	A
Beta-BHC	ND		ug/kg	1.84	0.696	1	A
Heptachlor	ND		ug/kg	0.918	0.412	1	A
Aldrin	ND		ug/kg	1.84	0.646	1	A
Heptachlor epoxide	ND		ug/kg	3.44	1.03	1	A
Endrin	ND		ug/kg	0.765	0.314	1	A
Endrin aldehyde	ND		ug/kg	2.29	0.803	1	A
Endrin ketone	ND		ug/kg	1.84	0.473	1	A
Dieldrin	ND		ug/kg	1.15	0.574	1	A
4,4'-DDE	ND		ug/kg	1.84	0.424	1	A
4,4'-DDD	ND		ug/kg	1.84	0.655	1	A
4,4'-DDT	ND		ug/kg	3.44	1.48	1	A
Endosulfan I	ND		ug/kg	1.84	0.434	1	A
Endosulfan II	ND		ug/kg	1.84	0.613	1	A
Endosulfan sulfate	ND		ug/kg	0.765	0.364	1	A
Methoxychlor	ND		ug/kg	3.44	1.07	1	A
Toxaphene	ND		ug/kg	34.4	9.64	1	A
cis-Chlordane	ND		ug/kg	2.29	0.639	1	A
trans-Chlordane	ND		ug/kg	2.29	0.606	1	A
Chlordane	ND		ug/kg	14.9	6.08	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	43		30-150	B
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	64		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-06
 Client ID: RB08_12-14
 Sample Location: BRONX, NY

Date Collected: 12/27/18 12:55
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 04:11
 Analyst: DGM
 Percent Solids: 84%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	196	12.4	1	B
2,4,5-T	ND		ug/kg	196	6.08	1	B
2,4,5-TP (Silvex)	ND		ug/kg	196	5.22	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	86		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 12:26
 Analyst: BM
 Percent Solids: 68%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.23	0.436	1	A
Lindane	ND		ug/kg	0.928	0.415	1	A
Alpha-BHC	ND		ug/kg	0.928	0.264	1	A
Beta-BHC	ND		ug/kg	2.23	0.845	1	A
Heptachlor	ND		ug/kg	1.11	0.499	1	A
Aldrin	ND		ug/kg	2.23	0.784	1	A
Heptachlor epoxide	ND		ug/kg	4.18	1.25	1	A
Endrin	ND		ug/kg	0.928	0.380	1	A
Endrin aldehyde	ND		ug/kg	2.78	0.975	1	A
Endrin ketone	ND		ug/kg	2.23	0.574	1	A
Dieldrin	ND		ug/kg	1.39	0.696	1	A
4,4'-DDE	ND		ug/kg	2.23	0.515	1	A
4,4'-DDD	ND		ug/kg	2.23	0.794	1	A
4,4'-DDT	ND		ug/kg	4.18	1.79	1	A
Endosulfan I	ND		ug/kg	2.23	0.526	1	A
Endosulfan II	ND		ug/kg	2.23	0.744	1	A
Endosulfan sulfate	ND		ug/kg	0.928	0.442	1	A
Methoxychlor	ND		ug/kg	4.18	1.30	1	A
Toxaphene	ND		ug/kg	41.8	11.7	1	A
cis-Chlordane	ND		ug/kg	2.78	0.776	1	A
trans-Chlordane	ND		ug/kg	2.78	0.735	1	A
Chlordane	ND		ug/kg	18.1	7.38	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-07

Date Collected: 12/27/18 13:00

Client ID: RB08_14-16

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	64		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1610	Q	30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-07
 Client ID: RB08_14-16
 Sample Location: BRONX, NY

Date Collected: 12/27/18 13:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 04:30
 Analyst: DGM
 Percent Solids: 68%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	244	15.3	1	B
2,4,5-T	ND		ug/kg	244	7.55	1	B
2,4,5-TP (Silvex)	ND		ug/kg	244	6.48	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/02/19 12:39
 Analyst: BM
 Percent Solids: 72%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.17	0.425	1	A
Lindane	ND		ug/kg	0.903	0.404	1	A
Alpha-BHC	ND		ug/kg	0.903	0.256	1	A
Beta-BHC	ND		ug/kg	2.17	0.822	1	A
Heptachlor	ND		ug/kg	1.08	0.486	1	A
Aldrin	ND		ug/kg	2.17	0.763	1	A
Heptachlor epoxide	ND		ug/kg	4.06	1.22	1	A
Endrin	ND		ug/kg	0.903	0.370	1	A
Endrin aldehyde	ND		ug/kg	2.71	0.948	1	A
Endrin ketone	ND		ug/kg	2.17	0.558	1	A
Dieldrin	ND		ug/kg	1.36	0.678	1	A
4,4'-DDE	ND		ug/kg	2.17	0.501	1	A
4,4'-DDD	ND		ug/kg	2.17	0.773	1	A
4,4'-DDT	ND		ug/kg	4.06	1.74	1	A
Endosulfan I	ND		ug/kg	2.17	0.512	1	A
Endosulfan II	ND		ug/kg	2.17	0.724	1	A
Endosulfan sulfate	ND		ug/kg	0.903	0.430	1	A
Methoxychlor	ND		ug/kg	4.06	1.26	1	A
Toxaphene	ND		ug/kg	40.6	11.4	1	A
cis-Chlordane	ND		ug/kg	2.71	0.755	1	A
trans-Chlordane	ND		ug/kg	2.71	0.716	1	A
Chlordane	ND		ug/kg	17.6	7.18	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	47		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1270	Q	30-150	A
Decachlorobiphenyl	58		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 04:49
 Analyst: DGM
 Percent Solids: 72%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	228	14.4	1	B
2,4,5-T	ND		ug/kg	228	7.07	1	B
2,4,5-TP (Silvex)	ND		ug/kg	228	6.06	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 05:26
 Analyst: DGM
 Percent Solids: 87%
 Methylation Date: 12/30/18 02:26

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	187	11.8	1	B
2,4,5-T	ND		ug/kg	187	5.80	1	B
2,4,5-TP (Silvex)	ND		ug/kg	187	4.97	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	44		30-150	A
DCAA	11	Q	30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09 D
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 11:23
 Analyst: KEG
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 12/28/18 10:00
 Cleanup Method: EPA 3620B
 Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	34.8	6.81	20	A
Lindane	ND		ug/kg	14.5	6.48	20	A
Alpha-BHC	ND		ug/kg	14.5	4.12	20	A
Beta-BHC	ND		ug/kg	34.8	13.2	20	A
Heptachlor	ND		ug/kg	17.4	7.80	20	A
Aldrin	ND		ug/kg	34.8	12.2	20	A
Heptachlor epoxide	ND		ug/kg	65.2	19.6	20	A
Endrin	ND		ug/kg	14.5	5.94	20	A
Endrin aldehyde	ND		ug/kg	43.5	15.2	20	A
Endrin ketone	ND		ug/kg	34.8	8.96	20	A
Dieldrin	ND		ug/kg	21.7	10.9	20	A
4,4'-DDE	ND		ug/kg	34.8	8.05	20	A
4,4'-DDD	ND		ug/kg	34.8	12.4	20	A
4,4'-DDT	ND		ug/kg	65.2	28.0	20	A
Endosulfan I	ND		ug/kg	34.8	8.22	20	A
Endosulfan II	ND		ug/kg	34.8	11.6	20	A
Endosulfan sulfate	ND		ug/kg	14.5	6.90	20	A
Methoxychlor	ND		ug/kg	65.2	20.3	20	A
Toxaphene	ND		ug/kg	652	183.	20	A
cis-Chlordane	ND		ug/kg	43.5	12.1	20	A
trans-Chlordane	ND		ug/kg	43.5	11.5	20	A
Chlordane	ND		ug/kg	283	115.	20	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09 D
 Client ID: RB01_9-11
 Sample Location: BRONX, NY

Date Collected: 12/27/18 09:35
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 12/30/18 18:13
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 12/31/18 00:25
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 12/28/18 15:07

Methylation Date: 12/29/18 17:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	103		30-150	A
DCAA	85		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/02/19 12:35
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 12/27/18 15:31

Methylation Date: 12/28/18 08:56

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 11 Batch: WG1193192-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	116		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/29/18 14:10
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 12/28/18 10:00
Cleanup Method: EPA 3620B
Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1193469-1						
Delta-BHC	ND		ug/kg	1.58	0.310	A
Lindane	ND		ug/kg	0.659	0.294	A
Alpha-BHC	ND		ug/kg	0.659	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.599	A
Heptachlor	ND		ug/kg	0.790	0.354	A
Aldrin	ND		ug/kg	1.58	0.557	A
Heptachlor epoxide	ND		ug/kg	2.96	0.889	A
Endrin	ND		ug/kg	0.659	0.270	A
Endrin aldehyde	ND		ug/kg	1.98	0.692	A
Endrin ketone	ND		ug/kg	1.58	0.407	A
Dieldrin	ND		ug/kg	0.988	0.494	A
4,4'-DDE	ND		ug/kg	1.58	0.366	A
4,4'-DDD	ND		ug/kg	1.58	0.564	A
4,4'-DDT	ND		ug/kg	2.96	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.374	A
Endosulfan II	ND		ug/kg	1.58	0.528	A
Endosulfan sulfate	ND		ug/kg	0.659	0.314	A
Methoxychlor	ND		ug/kg	2.96	0.922	A
Toxaphene	ND		ug/kg	29.6	8.30	A
cis-Chlordane	ND		ug/kg	1.98	0.551	A
trans-Chlordane	ND		ug/kg	1.98	0.522	A
Chlordane	ND		ug/kg	12.8	5.24	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
Analytical Date: 12/29/18 14:10
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 12/28/18 10:00
Cleanup Method: EPA 3620B
Cleanup Date: 12/29/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1193469-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	85		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	78		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 12/31/18 00:44
Analyst: DGM

Extraction Method: EPA 8151A
Extraction Date: 12/28/18 15:49

Methylation Date: 12/29/18 17:43

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1193627-1						
2,4-D	ND		ug/kg	164	10.3	B
2,4,5-T	ND		ug/kg	164	5.08	B
2,4,5-TP (Silvex)	ND		ug/kg	164	4.36	B

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	107		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 12/30/18 17:22
Analyst: KEG

Extraction Method: EPA 3510C
Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG1193824-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A
4,4'-DDT	0.025	JIP	ug/l	0.029	0.003	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 12/30/18 17:22
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 12/30/18 07:08

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG1193824-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	61		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1193192-2 WG1193192-3									
2,4-D	104		103		30-150	1		25	A
2,4,5-T	107		111		30-150	4		25	A
2,4,5-TP (Silvex)	101		100		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	115		115		30-150	A
DCAA	104		122		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1193469-2 WG1193469-3									
Delta-BHC	92		82		30-150	11		30	A
Lindane	94		85		30-150	10		30	A
Alpha-BHC	99		90		30-150	10		30	A
Beta-BHC	98		84		30-150	15		30	A
Heptachlor	94		84		30-150	11		30	A
Aldrin	89		81		30-150	9		30	A
Heptachlor epoxide	91		83		30-150	9		30	A
Endrin	98		88		30-150	11		30	A
Endrin aldehyde	83		65		30-150	24		30	A
Endrin ketone	96		77		30-150	22		30	A
Dieldrin	106		95		30-150	11		30	A
4,4'-DDE	91		82		30-150	10		30	A
4,4'-DDD	97		87		30-150	11		30	A
4,4'-DDT	102		92		30-150	10		30	A
Endosulfan I	88		80		30-150	10		30	A
Endosulfan II	94		81		30-150	15		30	A
Endosulfan sulfate	75		59		30-150	24		30	A
Methoxychlor	107		94		30-150	13		30	A
cis-Chlordane	78		71		30-150	9		30	A
trans-Chlordane	79		76		30-150	4		30	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1193469-2 WG1193469-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	83		78		30-150	B
Decachlorobiphenyl	89		87		30-150	B
2,4,5,6-Tetrachloro-m-xylene	76		68		30-150	A
Decachlorobiphenyl	81		81		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1193627-2 WG1193627-3									
2,4-D	106		91		30-150	15		30	B
2,4,5-T	116		107		30-150	8		30	B
2,4,5-TP (Silvex)	99		91		30-150	8		30	B

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria	Column
DCAA	122		112		30-150	A
DCAA	96		84		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1193824-2 WG1193824-3									
Delta-BHC	79		83		30-150	5		20	A
Lindane	78		83		30-150	6		20	A
Alpha-BHC	82		86		30-150	5		20	A
Beta-BHC	72		80		30-150	10		20	A
Heptachlor	72		76		30-150	6		20	A
Aldrin	76		80		30-150	5		20	A
Heptachlor epoxide	77		83		30-150	7		20	A
Endrin	78		82		30-150	6		20	A
Endrin aldehyde	74		78		30-150	5		20	A
Endrin ketone	79		82		30-150	4		20	A
Dieldrin	83		88		30-150	5		20	A
4,4'-DDE	76		82		30-150	7		20	A
4,4'-DDD	76		81		30-150	6		20	A
4,4'-DDT	78		84		30-150	8		20	A
Endosulfan I	74		78		30-150	6		20	A
Endosulfan II	73		77		30-150	5		20	A
Endosulfan sulfate	69		73		30-150	6		20	A
Methoxychlor	87		90		30-150	4		20	A
cis-Chlordane	66		67		30-150	0		20	A
trans-Chlordane	73		78		30-150	6		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1193824-2 WG1193824-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	64		67		30-150	A
Decachlorobiphenyl	38		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		74		30-150	B
Decachlorobiphenyl	42		41		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab ID: RB01_25-27 Associated sample(s): 01-09 QC Batch ID: WG1193469-4 WG1193469-5 QC Sample: L1853234-03 Client													
Delta-BHC	ND	52.8	31.9	60		41.8	78		30-150	27		50	A
Lindane	ND	52.8	31.2	59		40.1	75		30-150	25		50	A
Alpha-BHC	ND	52.8	40.2	76		45.1	84		30-150	11		50	A
Beta-BHC	ND	52.8	21.8	41		34.7	65		30-150	46		50	A
Heptachlor	ND	52.8	43.2P	82		45.4	85		30-150	5		50	A
Aldrin	ND	52.8	43.0	81		50.0	93		30-150	15		50	A
Heptachlor epoxide	ND	52.8	33.2	63		41.8	78		30-150	23		50	A
Endrin	ND	52.8	43.7	83		52.9	98		30-150	19		50	A
Endrin aldehyde	ND	52.8	28.5	54		31.3	58		30-150	9		50	A
Endrin ketone	ND	52.8	32.3	61		36.4	68		30-150	12		50	A
Dieldrin	ND	52.8	44.6	84		49.0	91		30-150	9		50	A
4,4'-DDE	ND	52.8	25.7	49		35.4	66		30-150	32		50	A
4,4'-DDD	ND	52.8	40.5	77		45.6	85		30-150	12		50	A
4,4'-DDT	2.79J	52.8	34.8	66		40.7	76		30-150	16		50	A
Endosulfan I	ND	52.8	33.2	63		40.7	76		30-150	20		50	A
Endosulfan II	ND	52.8	35.3	67		43.5	81		30-150	21		50	A
Endosulfan sulfate	ND	52.8	21.6	41		31.2	58		30-150	36		50	A
Methoxychlor	ND	52.8	44.7	85		44.0	82		30-150	2		50	A
cis-Chlordane	ND	52.8	28.3	54		36.8	69		30-150	26		50	A
trans-Chlordane	ND	52.8	28.9	55		36.0	67		30-150	22		50	A

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193469-4 WG1193469-5 QC Sample: L1853234-03 Client ID: RB01_25-27

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	56		65		30-150	B
Decachlorobiphenyl	61		72		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1472	Q	2746	Q	30-150	A
Decachlorobiphenyl	73		64		30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193627-4 WG1193627-5 QC Sample: L1853234-03 Client ID: RB01_25-27													
2,4-D	ND	272	291	107		286	105		30-150	2		30	B
2,4,5-T	ND	272	338	124		334	122		30-150	1		30	B
2,4,5-TP (Silvex)	ND	272	273	101		270J	99		30-150	1		30	B

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
DCAA	135		126		30-150	A
DCAA	111		107		30-150	B

METALS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-01

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9400		mg/kg	9.22	2.49	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.61	0.350	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Arsenic, Total	43.7		mg/kg	0.922	0.192	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Barium, Total	591		mg/kg	0.922	0.160	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.461	0.030	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Cadmium, Total	3.34		mg/kg	0.922	0.090	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Calcium, Total	32200		mg/kg	9.22	3.23	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Chromium, Total	51.9		mg/kg	0.922	0.089	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Cobalt, Total	11.3		mg/kg	1.84	0.153	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Copper, Total	275		mg/kg	0.922	0.238	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Iron, Total	21700		mg/kg	4.61	0.832	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Lead, Total	619		mg/kg	4.61	0.247	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Magnesium, Total	7590		mg/kg	9.22	1.42	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Manganese, Total	253		mg/kg	0.922	0.146	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Mercury, Total	0.536		mg/kg	0.076	0.016	1	12/28/18 06:30	01/03/19 21:36	EPA 7471B	1,7471B	EA
Nickel, Total	19.9		mg/kg	2.30	0.223	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Potassium, Total	5290		mg/kg	230	13.3	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Selenium, Total	1.95		mg/kg	1.84	0.238	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Silver, Total	1.74		mg/kg	0.922	0.261	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Sodium, Total	244		mg/kg	184	2.90	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.84	0.290	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Vanadium, Total	34.6		mg/kg	0.922	0.187	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
Zinc, Total	1080		mg/kg	4.61	0.270	2	12/28/18 17:48	12/29/18 05:30	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	52		mg/kg	0.96	0.96	1		12/29/18 05:30	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-02

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 63%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8370		mg/kg	12.0	3.25	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	6.02	0.458	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Arsenic, Total	0.337	J	mg/kg	1.20	0.250	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Barium, Total	78.3		mg/kg	1.20	0.210	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Beryllium, Total	0.048	J	mg/kg	0.602	0.040	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Cadmium, Total	0.217	J	mg/kg	1.20	0.118	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Calcium, Total	3350		mg/kg	12.0	4.22	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Chromium, Total	20.6		mg/kg	1.20	0.116	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Cobalt, Total	9.48		mg/kg	2.41	0.200	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Copper, Total	22.8		mg/kg	1.20	0.311	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Iron, Total	16000		mg/kg	6.02	1.09	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Lead, Total	19.7		mg/kg	6.02	0.323	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Magnesium, Total	3840		mg/kg	12.0	1.86	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Manganese, Total	225		mg/kg	1.20	0.192	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Mercury, Total	0.131		mg/kg	0.102	0.022	1	12/28/18 06:30	01/03/19 21:37	EPA 7471B	1,7471B	EA
Nickel, Total	23.4		mg/kg	3.01	0.292	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Potassium, Total	3340		mg/kg	301	17.3	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Selenium, Total	0.626	J	mg/kg	2.41	0.311	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	1.20	0.341	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Sodium, Total	323		mg/kg	241	3.79	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.41	0.379	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Vanadium, Total	24.3		mg/kg	1.20	0.244	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
Zinc, Total	40.9		mg/kg	6.02	0.353	2	12/28/18 17:48	12/29/18 05:35	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	21		mg/kg	1.3	1.3	1		12/29/18 05:35	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-03

Date Collected: 12/27/18 09:45

Client ID: RB01_25-27

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 60%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	13200		mg/kg	13.2	3.57	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	6.62	0.503	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Arsenic, Total	6.94		mg/kg	1.32	0.275	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Barium, Total	28.4		mg/kg	1.32	0.230	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Beryllium, Total	0.516	J	mg/kg	0.662	0.044	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Cadmium, Total	0.503	J	mg/kg	1.32	0.130	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Calcium, Total	2740		mg/kg	13.2	4.63	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Chromium, Total	28.8		mg/kg	1.32	0.127	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Cobalt, Total	9.66		mg/kg	2.65	0.220	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Copper, Total	12.5		mg/kg	1.32	0.341	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Iron, Total	26800		mg/kg	6.62	1.20	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Lead, Total	23.5		mg/kg	6.62	0.355	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Magnesium, Total	6200		mg/kg	13.2	2.04	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Manganese, Total	349		mg/kg	1.32	0.210	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Mercury, Total	0.032	J	mg/kg	0.105	0.022	1	12/28/18 06:30	01/03/19 21:27	EPA 7471B	1,7471B	EA
Nickel, Total	20.2		mg/kg	3.31	0.320	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Potassium, Total	2880		mg/kg	331	19.0	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Selenium, Total	1.06	J	mg/kg	2.65	0.341	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	1.32	0.374	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Sodium, Total	701		mg/kg	265	4.17	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.65	0.417	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Vanadium, Total	36.3		mg/kg	1.32	0.269	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
Zinc, Total	69.5		mg/kg	6.62	0.388	2	12/28/18 17:48	12/29/18 03:49	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	29		mg/kg	1.3	1.3	1		12/29/18 03:49	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4610		mg/kg	8.55	2.31	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.28	0.325	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Arsenic, Total	7.20		mg/kg	0.855	0.178	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Barium, Total	1460		mg/kg	0.855	0.149	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.428	0.028	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Cadmium, Total	5.19		mg/kg	0.855	0.084	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Calcium, Total	37000		mg/kg	8.55	2.99	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Chromium, Total	15.4		mg/kg	0.855	0.082	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Cobalt, Total	4.93		mg/kg	1.71	0.142	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Copper, Total	19.3		mg/kg	0.855	0.221	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Iron, Total	8200		mg/kg	4.28	0.772	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Lead, Total	753		mg/kg	4.28	0.229	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Magnesium, Total	3810		mg/kg	8.55	1.32	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Manganese, Total	220		mg/kg	0.855	0.136	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Mercury, Total	0.213		mg/kg	0.071	0.015	1	12/28/18 06:30	01/03/19 21:39	EPA 7471B	1,7471B	EA
Nickel, Total	7.02		mg/kg	2.14	0.207	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Potassium, Total	1520		mg/kg	214	12.3	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Selenium, Total	0.428	J	mg/kg	1.71	0.221	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.855	0.242	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Sodium, Total	240		mg/kg	171	2.69	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.71	0.269	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Vanadium, Total	20.9		mg/kg	0.855	0.174	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
Zinc, Total	2990		mg/kg	4.28	0.251	2	12/28/18 17:48	12/29/18 05:39	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	15		mg/kg	0.91	0.91	1		12/29/18 05:39	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5340		mg/kg	8.91	2.40	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.45	0.338	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Arsenic, Total	4.90		mg/kg	0.891	0.185	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Barium, Total	661		mg/kg	0.891	0.155	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Beryllium, Total	0.089	J	mg/kg	0.445	0.029	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Cadmium, Total	0.712	J	mg/kg	0.891	0.087	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Calcium, Total	44700		mg/kg	8.91	3.12	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Chromium, Total	18.0		mg/kg	0.891	0.086	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Cobalt, Total	5.75		mg/kg	1.78	0.148	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Copper, Total	23.4		mg/kg	0.891	0.230	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Iron, Total	11800		mg/kg	4.45	0.804	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Lead, Total	229		mg/kg	4.45	0.239	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Magnesium, Total	4440		mg/kg	8.91	1.37	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Manganese, Total	200		mg/kg	0.891	0.142	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Mercury, Total	0.177		mg/kg	0.072	0.015	1	12/28/18 06:30	01/03/19 21:46	EPA 7471B	1,7471B	EA
Nickel, Total	11.2		mg/kg	2.23	0.216	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Potassium, Total	1590		mg/kg	223	12.8	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.78	0.230	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Silver, Total	0.338	J	mg/kg	0.891	0.252	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Sodium, Total	287		mg/kg	178	2.80	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.78	0.280	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Vanadium, Total	23.8		mg/kg	0.891	0.181	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
Zinc, Total	439		mg/kg	4.45	0.261	2	12/28/18 17:48	12/29/18 05:44	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	18		mg/kg	0.92	0.92	1		12/29/18 05:44	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9200		mg/kg	9.00	2.43	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.50	0.342	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Arsenic, Total	2.24		mg/kg	0.900	0.187	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Barium, Total	112		mg/kg	0.900	0.156	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Beryllium, Total	0.117	J	mg/kg	0.450	0.030	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Cadmium, Total	0.333	J	mg/kg	0.900	0.088	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Calcium, Total	12000		mg/kg	9.00	3.15	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Chromium, Total	18.1		mg/kg	0.900	0.086	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Cobalt, Total	9.87		mg/kg	1.80	0.149	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Copper, Total	23.9		mg/kg	0.900	0.232	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Iron, Total	18600		mg/kg	4.50	0.813	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Lead, Total	160		mg/kg	4.50	0.241	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Magnesium, Total	4260		mg/kg	9.00	1.38	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Manganese, Total	370		mg/kg	0.900	0.143	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Mercury, Total	0.364		mg/kg	0.076	0.016	1	12/28/18 06:30	01/03/19 21:47	EPA 7471B	1,7471B	EA
Nickel, Total	16.6		mg/kg	2.25	0.218	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Potassium, Total	3020		mg/kg	225	13.0	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Selenium, Total	0.504	J	mg/kg	1.80	0.232	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.900	0.255	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Sodium, Total	89.7	J	mg/kg	180	2.83	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.80	0.283	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Vanadium, Total	28.3		mg/kg	0.900	0.183	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
Zinc, Total	85.2		mg/kg	4.50	0.264	2	12/28/18 17:48	12/29/18 05:49	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	18		mg/kg	0.96	0.96	1		12/29/18 05:49	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-07

Date Collected: 12/27/18 13:00

Client ID: RB08_14-16

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 68%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	11000		mg/kg	11.7	3.15	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	5.83	0.443	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Arsenic, Total	7.97		mg/kg	1.17	0.243	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Barium, Total	40.4		mg/kg	1.17	0.203	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Beryllium, Total	0.443	J	mg/kg	0.583	0.039	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Cadmium, Total	0.455	J	mg/kg	1.17	0.114	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Calcium, Total	2860		mg/kg	11.7	4.08	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Chromium, Total	24.1		mg/kg	1.17	0.112	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Cobalt, Total	7.78		mg/kg	2.33	0.194	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Copper, Total	19.2		mg/kg	1.17	0.301	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Iron, Total	22100		mg/kg	5.83	1.05	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Lead, Total	53.6		mg/kg	5.83	0.313	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Magnesium, Total	5030		mg/kg	11.7	1.80	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Manganese, Total	299		mg/kg	1.17	0.186	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Mercury, Total	1.45		mg/kg	0.094	0.020	1	12/28/18 06:30	01/03/19 21:49	EPA 7471B	1,7471B	EA
Nickel, Total	17.2		mg/kg	2.92	0.282	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Potassium, Total	2240		mg/kg	292	16.8	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Selenium, Total	0.607	J	mg/kg	2.33	0.301	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	1.17	0.330	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Sodium, Total	386		mg/kg	233	3.68	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.33	0.368	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Vanadium, Total	28.4		mg/kg	1.17	0.237	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
Zinc, Total	73.4		mg/kg	5.83	0.342	2	12/28/18 17:48	12/29/18 05:53	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	24		mg/kg	1.2	1.2	1		12/29/18 05:53	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-08
 Client ID: SODUP02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 00:00
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	10400		mg/kg	10.6	2.87	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	5.32	0.404	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Arsenic, Total	6.46		mg/kg	1.06	0.221	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Barium, Total	51.6		mg/kg	1.06	0.185	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Beryllium, Total	0.361	J	mg/kg	0.532	0.035	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Cadmium, Total	0.415	J	mg/kg	1.06	0.104	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Calcium, Total	5700		mg/kg	10.6	3.72	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Chromium, Total	23.9		mg/kg	1.06	0.102	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Cobalt, Total	7.84		mg/kg	2.13	0.176	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Copper, Total	23.8		mg/kg	1.06	0.274	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Iron, Total	19700		mg/kg	5.32	0.960	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Lead, Total	71.3		mg/kg	5.32	0.285	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Magnesium, Total	4740		mg/kg	10.6	1.64	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Manganese, Total	258		mg/kg	1.06	0.169	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Mercury, Total	0.125		mg/kg	0.087	0.018	1	12/28/18 06:30	01/03/19 21:51	EPA 7471B	1,7471B	EA
Nickel, Total	18.4		mg/kg	2.66	0.257	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Potassium, Total	2340		mg/kg	266	15.3	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Selenium, Total	0.999	J	mg/kg	2.13	0.274	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	1.06	0.301	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Sodium, Total	351		mg/kg	213	3.35	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.13	0.335	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Vanadium, Total	27.0		mg/kg	1.06	0.216	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
Zinc, Total	96.3		mg/kg	5.32	0.311	2	12/28/18 17:48	12/29/18 05:58	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	24		mg/kg	1.1	1.1	1		12/29/18 05:58	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09

Date Collected: 12/27/18 09:35

Client ID: RB01_9-11

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9740		mg/kg	8.93	2.41	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.46	0.339	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Arsenic, Total	3.88		mg/kg	0.893	0.186	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Barium, Total	92.0		mg/kg	0.893	0.155	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Beryllium, Total	0.170	J	mg/kg	0.446	0.030	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Cadmium, Total	0.402	J	mg/kg	0.893	0.088	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Calcium, Total	13300		mg/kg	8.93	3.12	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Chromium, Total	19.6		mg/kg	0.893	0.086	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Cobalt, Total	9.06		mg/kg	1.79	0.148	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Copper, Total	88.4		mg/kg	0.893	0.230	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Iron, Total	18800		mg/kg	4.46	0.806	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Lead, Total	134		mg/kg	4.46	0.239	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Magnesium, Total	4520		mg/kg	8.93	1.38	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Manganese, Total	234		mg/kg	0.893	0.142	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Mercury, Total	0.262		mg/kg	0.072	0.015	1	12/28/18 06:30	01/03/19 21:53	EPA 7471B	1,7471B	EA
Nickel, Total	19.8		mg/kg	2.23	0.216	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Potassium, Total	2880		mg/kg	223	12.9	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Selenium, Total	1.03	J	mg/kg	1.79	0.230	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.893	0.253	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Sodium, Total	209		mg/kg	179	2.81	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.79	0.281	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Vanadium, Total	23.7		mg/kg	0.893	0.181	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
Zinc, Total	216		mg/kg	4.46	0.262	2	12/28/18 17:48	12/29/18 06:02	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	20		mg/kg	0.92	0.92	1		12/29/18 06:02	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.100	0.032	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Antimony, Total	ND		mg/l	0.050	0.007	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Arsenic, Total	ND		mg/l	0.005	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Barium, Total	0.002	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Beryllium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Cadmium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Calcium, Total	ND		mg/l	0.100	0.035	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Chromium, Total	0.003	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Cobalt, Total	ND		mg/l	0.020	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Copper, Total	0.005	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Iron, Total	ND		mg/l	0.050	0.009	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Lead, Total	ND		mg/l	0.010	0.003	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Magnesium, Total	ND		mg/l	0.100	0.015	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Manganese, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/03/19 11:53	01/03/19 16:26	EPA 7470A	1,7470A	GD
Nickel, Total	ND		mg/l	0.025	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Potassium, Total	ND		mg/l	2.50	0.237	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Selenium, Total	ND		mg/l	0.010	0.004	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Silver, Total	ND		mg/l	0.007	0.003	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Sodium, Total	ND		mg/l	2.00	0.120	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Thallium, Total	ND		mg/l	0.020	0.003	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Vanadium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
Zinc, Total	ND		mg/l	0.050	0.002	1	01/02/19 12:55	01/03/19 12:01	EPA 3005A	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/03/19 12:01	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG1193357-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	12/28/18 06:30	01/03/19 21:24	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG1193639-1										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Antimony, Total	ND	mg/kg	2.00	0.152	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Barium, Total	ND	mg/kg	0.400	0.070	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Calcium, Total	ND	mg/kg	4.00	1.40	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Chromium, Total	ND	mg/kg	0.400	0.038	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Cobalt, Total	ND	mg/kg	0.800	0.066	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Copper, Total	ND	mg/kg	0.400	0.103	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Iron, Total	ND	mg/kg	2.00	0.361	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Lead, Total	ND	mg/kg	2.00	0.107	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Manganese, Total	ND	mg/kg	0.400	0.064	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Nickel, Total	ND	mg/kg	1.00	0.097	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Potassium, Total	ND	mg/kg	100	5.76	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Selenium, Total	ND	mg/kg	0.800	0.103	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Silver, Total	ND	mg/kg	0.400	0.113	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Sodium, Total	1.49	J	mg/kg	80.0	1.26	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC
Thallium, Total	ND	mg/kg	0.800	0.126	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	
Zinc, Total	ND	mg/kg	2.00	0.117	1	12/28/18 17:48	12/29/18 02:45	1,6010D	MC	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 11 Batch: WG1194043-1										
Aluminum, Total	ND		mg/l	0.100	0.032	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Antimony, Total	ND		mg/l	0.050	0.007	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Arsenic, Total	ND		mg/l	0.005	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Barium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Beryllium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Cadmium, Total	ND		mg/l	0.005	0.001	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Calcium, Total	ND		mg/l	0.100	0.035	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Chromium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Cobalt, Total	ND		mg/l	0.020	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Copper, Total	0.004	J	mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Iron, Total	ND		mg/l	0.050	0.009	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Lead, Total	ND		mg/l	0.010	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Magnesium, Total	ND		mg/l	0.100	0.015	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Manganese, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Nickel, Total	ND		mg/l	0.025	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Potassium, Total	ND		mg/l	2.50	0.237	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Selenium, Total	ND		mg/l	0.010	0.004	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Silver, Total	ND		mg/l	0.007	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Sodium, Total	ND		mg/l	2.00	0.120	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Thallium, Total	ND		mg/l	0.020	0.003	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Vanadium, Total	ND		mg/l	0.010	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC
Zinc, Total	ND		mg/l	0.050	0.002	1	01/02/19 12:55	01/03/19 09:28	1,6010D	LC

Prep Information

Digestion Method: EPA 3005A



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 11 Batch: WG1194425-1									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	01/03/19 11:53	01/03/19 16:22	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1193357-2 SRM Lot Number: D102-540								
Mercury, Total	75		-		65-134	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1193639-2 SRM Lot Number: D102-540					
Aluminum, Total	67	-	49-150	-	
Antimony, Total	148	-	1-199	-	
Arsenic, Total	90	-	83-117	-	
Barium, Total	86	-	83-118	-	
Beryllium, Total	89	-	83-116	-	
Cadmium, Total	98	-	83-118	-	
Calcium, Total	86	-	82-118	-	
Chromium, Total	85	-	83-117	-	
Cobalt, Total	88	-	84-116	-	
Copper, Total	85	-	84-116	-	
Iron, Total	83	-	61-139	-	
Lead, Total	86	-	82-118	-	
Magnesium, Total	77	-	76-124	-	
Manganese, Total	88	-	82-118	-	
Nickel, Total	89	-	83-117	-	
Potassium, Total	76	-	70-130	-	
Selenium, Total	90	-	79-121	-	
Silver, Total	86	-	80-120	-	
Sodium, Total	94	-	74-126	-	
Thallium, Total	95	-	81-119	-	
Vanadium, Total	84	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1193639-2 SRM Lot Number: D102-540					
Zinc, Total	87	-	81-118	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1194043-2					
Aluminum, Total	111	-	80-120	-	
Antimony, Total	98	-	80-120	-	
Arsenic, Total	115	-	80-120	-	
Barium, Total	105	-	80-120	-	
Beryllium, Total	104	-	80-120	-	
Cadmium, Total	111	-	80-120	-	
Calcium, Total	108	-	80-120	-	
Chromium, Total	104	-	80-120	-	
Cobalt, Total	103	-	80-120	-	
Copper, Total	102	-	80-120	-	
Iron, Total	112	-	80-120	-	
Lead, Total	110	-	80-120	-	
Magnesium, Total	112	-	80-120	-	
Manganese, Total	102	-	80-120	-	
Nickel, Total	104	-	80-120	-	
Potassium, Total	109	-	80-120	-	
Selenium, Total	118	-	80-120	-	
Silver, Total	110	-	80-120	-	
Sodium, Total	115	-	80-120	-	
Thallium, Total	109	-	80-120	-	
Vanadium, Total	107	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1194043-2					
Zinc, Total	110	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1194425-2					
Mercury, Total	102	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1193357-3 WG1193357-4 QC Sample: L1853234-03 Client ID: RB01_25-27									
Mercury, Total	0.032J	0.208	0.210	101	0.222	107	80-120	6	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits		
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1193639-3 WG1193639-4 QC Sample: L1853234-03 Client ID: RB01_25-27											
Aluminum, Total	13200	265	14700	566	Q	14000	304	Q	75-125	5	20
Antimony, Total	ND	66.2	50.8	77		49.4	75		75-125	3	20
Arsenic, Total	6.94	15.9	21.7	93		21.2	90		75-125	2	20
Barium, Total	28.4	265	268	90		251	85		75-125	7	20
Beryllium, Total	0.516J	6.62	6.45	97		6.17	94		75-125	4	20
Cadmium, Total	0.503J	6.76	6.30	93		6.09	91		75-125	3	20
Calcium, Total	2740	1320	3520	59	Q	3310	43	Q	75-125	6	20
Chromium, Total	28.8	26.5	52.5	89		50.8	84		75-125	3	20
Cobalt, Total	9.66	66.2	64.3	82		61.6	79		75-125	4	20
Copper, Total	12.5	33.1	39.3	81		35.9	71	Q	75-125	9	20
Iron, Total	26800	132	28800	1510	Q	27900	836	Q	75-125	3	20
Lead, Total	23.5	67.6	69.2	68	Q	66.5	64	Q	75-125	4	20
Magnesium, Total	6200	1320	7600	106		7270	81		75-125	4	20
Manganese, Total	349	66.2	405	84		386	56	Q	75-125	5	20
Nickel, Total	20.2	66.2	75.0	83		71.6	78		75-125	5	20
Potassium, Total	2880	1320	4550	126	Q	4150	96		75-125	9	20
Selenium, Total	1.06J	15.9	14.6	92		13.7	87		75-125	6	20
Silver, Total	ND	39.7	36.3	91		35.1	89		75-125	3	20
Sodium, Total	701	1320	1890	90		1820	85		75-125	4	20
Thallium, Total	ND	15.9	12.0	75		11.8	75		75-125	2	20
Vanadium, Total	36.3	66.2	96.8	91		92.8	86		75-125	4	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1193639-3 WG1193639-4 QC Sample: L1853234-03 Client ID: RB01_25-27									
Zinc, Total	69.5	66.2	122	79	117	72	Q 75-125	4	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194043-3 QC Sample: L1852881-01 Client ID: MS Sample									
Aluminum, Total	0.139	2	2.39	112	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.523	105	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.138	115	-	-	75-125	-	20
Barium, Total	0.004J	2	2.13	106	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.053	106	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.057	112	-	-	75-125	-	20
Calcium, Total	7.51	10	19.2	117	-	-	75-125	-	20
Chromium, Total	ND	0.2	0.212	106	-	-	75-125	-	20
Cobalt, Total	0.002J	0.5	0.523	105	-	-	75-125	-	20
Copper, Total	0.005J	0.25	0.261	104	-	-	75-125	-	20
Iron, Total	0.151	1	1.29	114	-	-	75-125	-	20
Lead, Total	ND	0.51	0.562	110	-	-	75-125	-	20
Magnesium, Total	1.50	10	12.7	112	-	-	75-125	-	20
Manganese, Total	0.018	0.5	0.530	102	-	-	75-125	-	20
Nickel, Total	0.007J	0.5	0.529	106	-	-	75-125	-	20
Potassium, Total	0.529J	10	11.4	114	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.142	118	-	-	75-125	-	20
Silver, Total	ND	0.05	0.054	108	-	-	75-125	-	20
Sodium, Total	2.04	10	13.4	114	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.131	109	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.539	108	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194043-3 QC Sample: L1852881-01 Client ID: MS Sample									
Zinc, Total	0.010J	0.5	0.566	113	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194425-3 QC Sample: L1853234-11 Client ID: SOFB02_122718									
Mercury, Total	ND	0.005	0.00459	92	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194043-4 QC Sample: L1852881-01 Client ID: DUP Sample						
Iron, Total	0.151	0.154	mg/l	2		20
Manganese, Total	0.018	0.019	mg/l	2		20
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1194425-4 QC Sample: L1853234-11 Client ID: SOFB02_122718						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-01

Date Collected: 12/27/18 09:30

Client ID: RB01_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.2		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	0.31	J	mg/kg	1.1	0.23	1	12/28/18 14:00	01/02/19 12:00	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.962	0.192	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-02

Date Collected: 12/27/18 09:40

Client ID: RB01_14-15

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	62.6		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	1.2	J	mg/kg	1.4	0.31	1	12/28/18 14:00	01/02/19 11:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.28	0.256	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-03

Date Collected: 12/27/18 09:45

Client ID: RB01_25-27

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	60.3		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.6	0.34	1	12/28/18 14:00	01/02/19 11:44	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.33	0.265	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-04

Date Collected: 12/27/18 12:45

Client ID: RB08_0-2

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.1		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/28/18 14:00	01/02/19 11:47	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.908	0.182	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-05

Date Collected: 12/27/18 12:50

Client ID: RB08_10-12

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.1		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/28/18 14:00	01/02/19 11:48	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.918	0.184	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-06

Date Collected: 12/27/18 12:55

Client ID: RB08_12-14

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.8		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	12/28/18 14:00	01/02/19 11:49	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.955	0.191	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-07

Date Collected: 12/27/18 13:00

Client ID: RB08_14-16

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	67.8		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.4	0.30	1	12/28/18 14:00	01/02/19 11:50	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.18	0.236	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-08

Date Collected: 12/27/18 00:00

Client ID: SODUP02_122718

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	72.3		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.3	0.27	1	12/28/18 14:00	01/02/19 11:51	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.11	0.221	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

SAMPLE RESULTS

Lab ID: L1853234-09

Date Collected: 12/27/18 09:35

Client ID: RB01_9-11

Date Received: 12/27/18

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.2		%	0.100	NA	1	-	12/28/18 11:48	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	12/28/18 14:00	01/02/19 11:52	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.917	0.183	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**SAMPLE RESULTS**

Lab ID: L1853234-11
 Client ID: SOFB02_122718
 Sample Location: BRONX, NY

Date Collected: 12/27/18 10:45
 Date Received: 12/27/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/28/18 10:40	12/28/18 15:15	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	12/28/18 05:00	12/28/18 05:42	1,7196A	JW



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1193370-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	12/28/18 05:00	12/28/18 05:41	1,7196A	JW
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1193431-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/28/18 10:40	12/28/18 12:57	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1193512-1										
Cyanide, Total	ND		mg/kg	0.94	0.20	1	12/28/18 14:00	01/02/19 11:36	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1193635-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	12/28/18 16:30	12/29/18 00:05	1,7196A	AJ

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1193370-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1193431-2 WG1193431-3								
Cyanide, Total	102		106		85-115	4		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1193512-2 WG1193512-3								
Cyanide, Total	80		73	Q	80-120	8		35
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1193635-2								
Chromium, Hexavalent	90		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1853234
Report Date: 01/07/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193370-4 QC Sample: L1853234-11 Client ID: SOFB02_122718												
Chromium, Hexavalent	ND	0.1	0.098	98		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193431-4 WG1193431-5 QC Sample: L1853104-01 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.162	81		0.183	92		80-120	12		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193512-4 WG1193512-5 QC Sample: L1853234-03 Client ID: RB01_25-27												
Cyanide, Total	ND	16	15	95		15	98		75-125	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193635-4 WG1193635-5 QC Sample: L1853234-03 Client ID: RB01_25-27												
Chromium, Hexavalent	ND	2110	289	14	Q	62.0J	3	Q	75-125	129	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1853234

Report Date: 01/07/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1193370-3 QC Sample: L1853234-11 Client ID: SOFB02_122718						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193532-1 QC Sample: L1853234-03 Client ID: RB01_25-27						
Solids, Total	60.3	59.2	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1193635-6 QC Sample: L1853234-03 Client ID: RB01_25-27						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1853234**Project Number:** 170487001**Report Date:** 01/07/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-01A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-01B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-01C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-01D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-01F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-01G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-02A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-02B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-02C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-02D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-02F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-02G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1853234

Project Number: 170487001

Report Date: 01/07/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-03A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-03A1	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-03A2	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-03B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03B1	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03B2	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03C1	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03C2	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-03D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-03D1	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-03D2	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-03E1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-03E2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-03F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-03F1	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-03F2	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

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L1853234-03G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-03G1	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-03G2	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-04A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-04B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-04C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-04D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-04F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-04G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-05A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-05B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-05C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-05D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-05F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-05G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-06A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-06B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-06C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-06D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-06F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-06G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-07A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-07B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-07C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-07D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-07F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-07G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-08A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-08B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-08C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-08D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)

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L1853234-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-08F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-08G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-09A	Vial MeOH preserved	A	NA		3.4	Y	Absent		NYTCL-8260HLW(14)
L1853234-09B	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-09C	Vial water preserved	A	NA		3.4	Y	Absent	28-DEC-18 01:50	NYTCL-8260HLW(14)
L1853234-09D	Plastic 2oz unpreserved for TS	A	NA		3.4	Y	Absent		TS(7)
L1853234-09E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-09F	Glass 120ml/4oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-09G	Glass 500ml/16oz unpreserved	A	NA		3.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1853234-10A	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L1853234-10B	Vial HCl preserved	A	NA		3.4	Y	Absent		NYTCL-8260(14)
L1853234-11A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1853234-11B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1853234-11C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260(14)
L1853234-11D	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1853234-11E	Plastic 250ml NaOH preserved	B	>12	>12	3.6	Y	Absent		TCN-9010(14)
L1853234-11F	Plastic 500ml unpreserved	B	7	7	3.6	Y	Absent		HEXCR-7196(1)

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Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1853234-11G	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1853234-11H	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-LVI(7)
L1853234-11I	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1853234-11J	Amber 120ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1853234-11K	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1853234-11L	Amber 250ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1853234-11M	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1853234-11N	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)

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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

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Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 2	Date Rec'd in Lab 12/27/18	ALPHA Job # 41853234									
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input checked="" type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #								
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:								
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.			ANALYSIS <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Part 375/TCL VOCs</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Part 375/TCL SVOCs</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Part 375/TCL PCBs</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Pesticides</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Herbicides</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">TAL Metals</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Hex Chromium</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Total Cyanide</td> </tr> </table>			Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total Cyanide	Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)
Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total Cyanide							
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection	Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total Cyanide	Sample Specific Comments	
		Date	Time											
53234-01	RB01-0-2	12/27/18	0930	Soil	JA	X	X	X	X	X	X	X		
	RB01-10-12		0935		JA	X	X	X	X	X	X	X	JA 12-27-18	
-02	RB01-14-15		0940		JA	X	X	X	X	X	X	X		
-03	RB01-25-27		0945		JA	X	X	X	X	X	X	X	MS/MSD collected	
-04	RB08-0-2		1245		JA	X	X	X	X	X	X	X		
-05	RB08-10-12		1250		JA	X	X	X	X	X	X	X		
-06	RB08-12-14		1255		JA	X	X	X	X	X	X	X		
-07	RB08-14-16		1300		JA	X	X	X	X	X	X	X		
-08	SOPUPO2-122718		-		JA	X	X	X	X	X	X	X	JA 12-27-18	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)				
Relinquished By:		Date/Time		Received By:		Date/Time								
J. Santos AAL		12/27/18 1345		P. Santos AAL		12/27/18 13:45								
J. Santos AAL		12/27/18 2300		J. Santos AAL		12/27/18 1900								

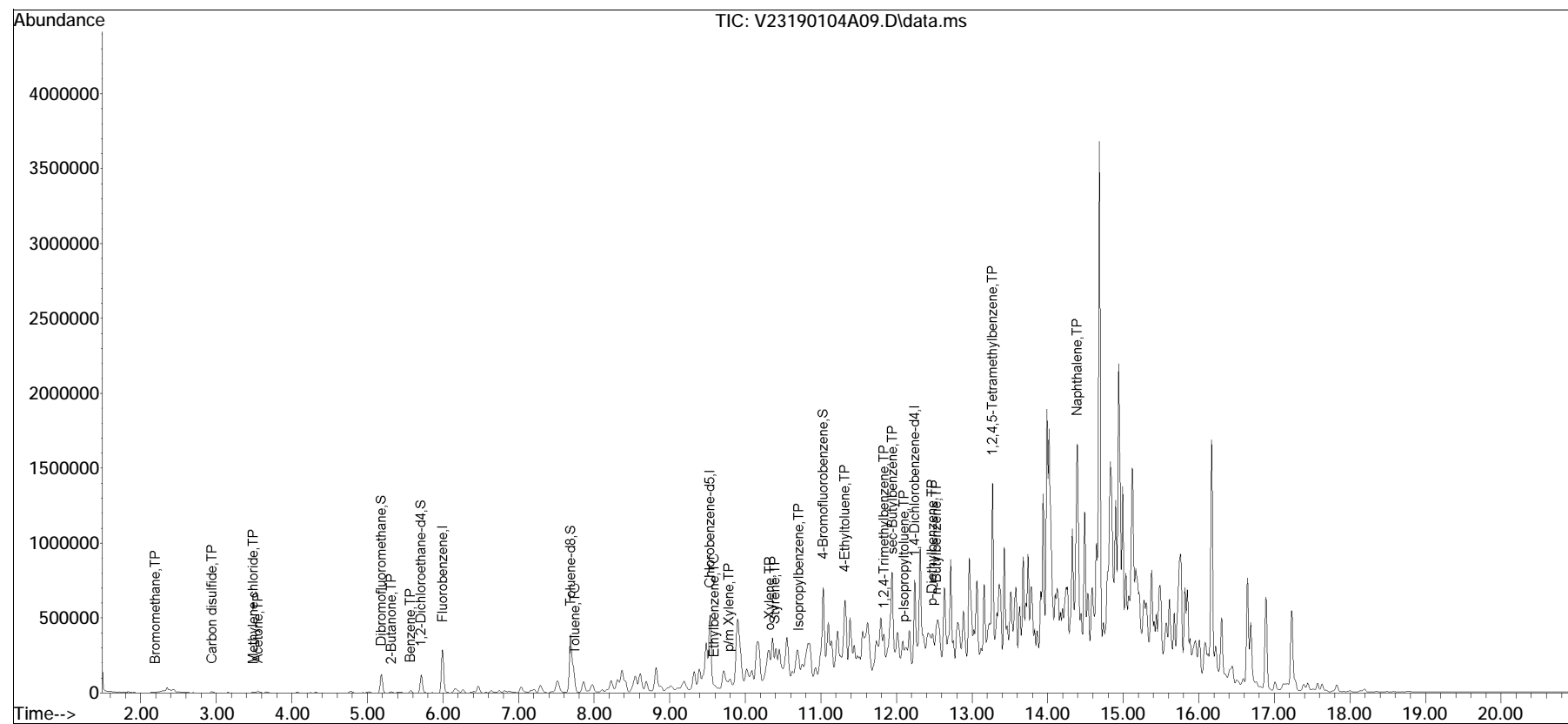
 Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-698-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 2 of 2	Date Rec'd in Lab 12/27/18	ALPHA Job # 11853234										
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #									
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ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	total organics	Sample Specific Comments	Total Bottles
	SOTB02 - 122718	12/27/18	1045	soil	JA	X	X	X	X	X	X	X	X	12-27/18	
53234-09	R301-9-11	12/27/18	0935	soil	JA	X	X	X	X	X	X	X	X		
-10	SOTB03 - 122718	-	-	AQ	JA	X									
-11	SOTB02 - 122718	12/27/18	1045	AQ	JA	X	X	X	X	X	X	X	X		
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative						Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
		Relinquished By:		Date/Time		Received By:		Date/Time							
		[Signature]		12/27/18 - 1345		[Signature]		12/27/18 13:45							
		[Signature]		12/27/18 15:21		D. Santos		12/27/18 1900							
		[Signature]		12/27/18 2300		[Signature]		12/27/18 2300							

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA123\2019\190104A\
 Data File : V23190104A09.D
 Acq On : 04 Jan 2019 02:59 pm
 Operator : VOA123:MKS
 Sample : 11853234-02,31H,3.60,5,0.100,,a
 Misc : WG1195021,ICAL15371
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 04 15:40:58 2019
 Quant Method : I:\VOLATILES\VOA123\2019\190104A\V123_190103D_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jan 04 09:22:26 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90104A\V23190104A03.D•





ANALYTICAL REPORT

Lab Number:	L1900156
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/09/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900156-01	RB09_0-2	SOIL	BRONX, NY	01/02/19 13:40	01/02/19
L1900156-02	RB09_19-21	SOIL	BRONX, NY	01/02/19 13:45	01/02/19
L1900156-03	RB09_28-30	SOIL	BRONX, NY	01/02/19 13:50	01/02/19
L1900156-04	RB11_0-2	SOIL	BRONX, NY	01/02/19 10:30	01/02/19
L1900156-05	RB11_19-21	SOIL	BRONX, NY	01/02/19 10:35	01/02/19
L1900156-06	RB11_28-30	SOIL	BRONX, NY	01/02/19 10:40	01/02/19
L1900156-07	SODUP03_010219	SOIL	BRONX, NY	01/02/19 00:00	01/02/19
L1900156-08	SOTB04_010219	WATER	BRONX, NY	01/02/19 00:00	01/02/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

L1900156-03: The collection date and time on the chain of custody was 02-JAN-19 13:40; however, the collection date/time on the container label was 02-JAN-19 13:50. At the client's request, the collection date/time is reported as 02-JAN-19 13:50.

Volatile Organics

L1900156-02, -05 and -07: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1900156-05: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (165%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L1900156-07: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (146%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Pesticides

L1900156-05 and -07: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1900156-05 and -07: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Herbicides

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Case Narrative (continued)

L1900156-07: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1900156-07: The surrogate recoveries are below the acceptance criteria for dcaa (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L1900156-01 through -07: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1194383-2/-3 LCS/LCSD recoveries (68%/72%), associated with L1900156-01 through -07, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/09/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 14:04
 Analyst: JC
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	0.70	J	ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.26	1
Tetrachloroethene	0.46	J	ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.69	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.16	1
Benzene	ND		ug/kg	0.50	0.16	1
Toluene	ND		ug/kg	1.0	0.54	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.93	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.33	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
Client ID: RB09_0-2
Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.91	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.5	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	0.99	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	100	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	98		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02 D
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 14:29
 Analyst: JC
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	2700	1200	10
1,1-Dichloroethane	ND		ug/kg	530	78.	10
Chloroform	ND		ug/kg	800	75.	10
Carbon tetrachloride	ND		ug/kg	530	120	10
1,2-Dichloropropane	ND		ug/kg	530	67.	10
Dibromochloromethane	ND		ug/kg	530	75.	10
1,1,2-Trichloroethane	ND		ug/kg	530	140	10
Tetrachloroethene	ND		ug/kg	270	100	10
Chlorobenzene	ND		ug/kg	270	68.	10
Trichlorofluoromethane	ND		ug/kg	2100	370	10
1,2-Dichloroethane	ND		ug/kg	530	140	10
1,1,1-Trichloroethane	ND		ug/kg	270	89.	10
Bromodichloromethane	ND		ug/kg	270	58.	10
trans-1,3-Dichloropropene	ND		ug/kg	530	140	10
cis-1,3-Dichloropropene	ND		ug/kg	270	84.	10
1,3-Dichloropropene, Total	ND		ug/kg	270	84.	10
1,1-Dichloropropene	ND		ug/kg	270	85.	10
Bromoform	ND		ug/kg	2100	130	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	270	89.	10
Benzene	1100		ug/kg	270	89.	10
Toluene	ND		ug/kg	530	290	10
Ethylbenzene	790		ug/kg	530	75.	10
Chloromethane	ND		ug/kg	2100	500	10
Bromomethane	ND		ug/kg	1100	310	10
Vinyl chloride	ND		ug/kg	530	180	10
Chloroethane	ND		ug/kg	1100	240	10
1,1-Dichloroethene	ND		ug/kg	530	130	10
trans-1,2-Dichloroethene	ND		ug/kg	800	73.	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-02 D

Date Collected: 01/02/19 13:45

Client ID: RB09_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	270	73.	10
1,2-Dichlorobenzene	ND		ug/kg	1100	77.	10
1,3-Dichlorobenzene	ND		ug/kg	1100	79.	10
1,4-Dichlorobenzene	ND		ug/kg	1100	91.	10
Methyl tert butyl ether	ND		ug/kg	1100	110	10
p/m-Xylene	500	J	ug/kg	1100	300	10
o-Xylene	ND		ug/kg	530	160	10
Xylenes, Total	500	J	ug/kg	530	160	10
cis-1,2-Dichloroethene	ND		ug/kg	530	94.	10
1,2-Dichloroethene, Total	ND		ug/kg	530	73.	10
Dibromomethane	ND		ug/kg	1100	130	10
Styrene	ND		ug/kg	530	100	10
Dichlorodifluoromethane	ND		ug/kg	5300	490	10
Acetone	ND		ug/kg	5300	2600	10
Carbon disulfide	ND		ug/kg	5300	2400	10
2-Butanone	ND		ug/kg	5300	1200	10
Vinyl acetate	ND		ug/kg	5300	1100	10
4-Methyl-2-pentanone	ND		ug/kg	5300	680	10
1,2,3-Trichloropropane	ND		ug/kg	1100	68.	10
2-Hexanone	ND		ug/kg	5300	630	10
Bromochloromethane	ND		ug/kg	1100	110	10
2,2-Dichloropropane	ND		ug/kg	1100	110	10
1,2-Dibromoethane	ND		ug/kg	530	150	10
1,3-Dichloropropane	ND		ug/kg	1100	89.	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	270	70.	10
Bromobenzene	ND		ug/kg	1100	78.	10
n-Butylbenzene	7200		ug/kg	530	89.	10
sec-Butylbenzene	2600		ug/kg	530	78.	10
tert-Butylbenzene	260	J	ug/kg	1100	63.	10
o-Chlorotoluene	ND		ug/kg	1100	100	10
p-Chlorotoluene	ND		ug/kg	1100	58.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1600	530	10
Hexachlorobutadiene	ND		ug/kg	2100	90.	10
Isopropylbenzene	8700		ug/kg	530	58.	10
p-Isopropyltoluene	340	J	ug/kg	530	58.	10
Naphthalene	600	J	ug/kg	2100	350	10
Acrylonitrile	ND		ug/kg	2100	610	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02 D
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	21000		ug/kg	530	91.	10
1,2,3-Trichlorobenzene	ND		ug/kg	1100	170	10
1,2,4-Trichlorobenzene	ND		ug/kg	1100	140	10
1,3,5-Trimethylbenzene	130	J	ug/kg	1100	100	10
1,2,4-Trimethylbenzene	ND		ug/kg	1100	180	10
1,4-Dioxane	ND		ug/kg	53000	19000	10
p-Diethylbenzene	5300		ug/kg	1100	95.	10
p-Ethyltoluene	1100		ug/kg	1100	200	10
1,2,4,5-Tetramethylbenzene	17000		ug/kg	1100	100	10
Ethyl ether	ND		ug/kg	1100	180	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	2700	760	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	128		70-130
Dibromofluoromethane	86		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 14:54
 Analyst: JC
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1
Dibromochloromethane	ND		ug/kg	0.98	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.49	0.16	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	0.19	J	ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	0.89	J	ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	3.9	0.91	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
Chloroethane	ND		ug/kg	2.0	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
Xylenes, Total	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.13	1
Dibromomethane	ND		ug/kg	2.0	0.23	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.90	1
Acetone	5.5	J	ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.5	1
2-Butanone	ND		ug/kg	9.8	2.2	1
Vinyl acetate	ND		ug/kg	9.8	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.12	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	2.0		ug/kg	0.98	0.16	1
sec-Butylbenzene	1.3		ug/kg	0.98	0.14	1
tert-Butylbenzene	0.48	J	ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.98	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	2.8		ug/kg	0.98	0.11	1
p-Isopropyltoluene	0.40	J	ug/kg	0.98	0.11	1
Naphthalene	5.4		ug/kg	3.9	0.64	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
Client ID: RB09_28-30
Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	6.0		ug/kg	0.98	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	0.27	J	ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	98	34.	1
p-Diethylbenzene	1.5	J	ug/kg	2.0	0.17	1
p-Ethyltoluene	0.74	J	ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	5.0		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	93		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 15:20
 Analyst: JC
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.96	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.96	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.96	0.12	1
Dibromochloromethane	ND		ug/kg	0.96	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.96	0.26	1
Tetrachloroethene	0.38	J	ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	0.84		ug/kg	0.48	0.16	1
Toluene	2.3		ug/kg	0.96	0.52	1
Ethylbenzene	0.56	J	ug/kg	0.96	0.14	1
Chloromethane	ND		ug/kg	3.8	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.96	0.32	1
Chloroethane	ND		ug/kg	1.9	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-04

Date Collected: 01/02/19 10:30

Client ID: RB11_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	4.7		ug/kg	1.9	0.54	1
o-Xylene	2.5		ug/kg	0.96	0.28	1
Xylenes, Total	7.2		ug/kg	0.96	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.96	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.96	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.88	1
Acetone	24		ug/kg	9.6	4.6	1
Carbon disulfide	ND		ug/kg	9.6	4.4	1
2-Butanone	ND		ug/kg	9.6	2.1	1
Vinyl acetate	ND		ug/kg	9.6	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.6	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.96	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.96	0.16	1
sec-Butylbenzene	0.16	J	ug/kg	0.96	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.96	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	0.19	J	ug/kg	0.96	0.10	1
p-Isopropyltoluene	0.24	J	ug/kg	0.96	0.10	1
Naphthalene	2.6	J	ug/kg	3.8	0.63	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
Client ID: RB11_0-2
Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.40	J	ug/kg	0.96	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	4.1		ug/kg	1.9	0.19	1
1,2,4-Trimethylbenzene	6.6		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	96	34.	1
p-Diethylbenzene	15		ug/kg	1.9	0.17	1
p-Ethyltoluene	4.4		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	5.9		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	123		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05 D
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 15:45
 Analyst: JC
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	600	280	2
1,1-Dichloroethane	ND		ug/kg	120	18.	2
Chloroform	ND		ug/kg	180	17.	2
Carbon tetrachloride	ND		ug/kg	120	28.	2
1,2-Dichloropropane	ND		ug/kg	120	15.	2
Dibromochloromethane	ND		ug/kg	120	17.	2
1,1,2-Trichloroethane	ND		ug/kg	120	32.	2
Tetrachloroethene	ND		ug/kg	60	24.	2
Chlorobenzene	ND		ug/kg	60	15.	2
Trichlorofluoromethane	ND		ug/kg	480	84.	2
1,2-Dichloroethane	ND		ug/kg	120	31.	2
1,1,1-Trichloroethane	ND		ug/kg	60	20.	2
Bromodichloromethane	ND		ug/kg	60	13.	2
trans-1,3-Dichloropropene	ND		ug/kg	120	33.	2
cis-1,3-Dichloropropene	ND		ug/kg	60	19.	2
1,3-Dichloropropene, Total	ND		ug/kg	60	19.	2
1,1-Dichloropropene	ND		ug/kg	60	19.	2
Bromoform	ND		ug/kg	480	30.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	60	20.	2
Benzene	ND		ug/kg	60	20.	2
Toluene	ND		ug/kg	120	66.	2
Ethylbenzene	260		ug/kg	120	17.	2
Chloromethane	ND		ug/kg	480	110	2
Bromomethane	ND		ug/kg	240	70.	2
Vinyl chloride	ND		ug/kg	120	40.	2
Chloroethane	ND		ug/kg	240	54.	2
1,1-Dichloroethene	ND		ug/kg	120	29.	2
trans-1,2-Dichloroethene	ND		ug/kg	180	16.	2

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-05 D

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	60	16.	2
1,2-Dichlorobenzene	ND		ug/kg	240	17.	2
1,3-Dichlorobenzene	ND		ug/kg	240	18.	2
1,4-Dichlorobenzene	ND		ug/kg	240	21.	2
Methyl tert butyl ether	ND		ug/kg	240	24.	2
p/m-Xylene	ND		ug/kg	240	68.	2
o-Xylene	ND		ug/kg	120	35.	2
Xylenes, Total	ND		ug/kg	120	35.	2
cis-1,2-Dichloroethene	ND		ug/kg	120	21.	2
1,2-Dichloroethene, Total	ND		ug/kg	120	16.	2
Dibromomethane	ND		ug/kg	240	29.	2
Styrene	ND		ug/kg	120	24.	2
Dichlorodifluoromethane	ND		ug/kg	1200	110	2
Acetone	ND		ug/kg	1200	580	2
Carbon disulfide	ND		ug/kg	1200	550	2
2-Butanone	ND		ug/kg	1200	270	2
Vinyl acetate	ND		ug/kg	1200	260	2
4-Methyl-2-pentanone	ND		ug/kg	1200	150	2
1,2,3-Trichloropropane	ND		ug/kg	240	15.	2
2-Hexanone	ND		ug/kg	1200	140	2
Bromochloromethane	ND		ug/kg	240	25.	2
2,2-Dichloropropane	ND		ug/kg	240	24.	2
1,2-Dibromoethane	ND		ug/kg	120	34.	2
1,3-Dichloropropane	ND		ug/kg	240	20.	2
1,1,1,2-Tetrachloroethane	ND		ug/kg	60	16.	2
Bromobenzene	ND		ug/kg	240	18.	2
n-Butylbenzene	4000		ug/kg	120	20.	2
sec-Butylbenzene	1400		ug/kg	120	18.	2
tert-Butylbenzene	160	J	ug/kg	240	14.	2
o-Chlorotoluene	ND		ug/kg	240	23.	2
p-Chlorotoluene	ND		ug/kg	240	13.	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	360	120	2
Hexachlorobutadiene	ND		ug/kg	480	20.	2
Isopropylbenzene	3000		ug/kg	120	13.	2
p-Isopropyltoluene	580		ug/kg	120	13.	2
Naphthalene	2700		ug/kg	480	78.	2
Acrylonitrile	ND		ug/kg	480	140	2

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05 D
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	9100		ug/kg	120	21.	2
1,2,3-Trichlorobenzene	ND		ug/kg	240	39.	2
1,2,4-Trichlorobenzene	ND		ug/kg	240	33.	2
1,3,5-Trimethylbenzene	250		ug/kg	240	23.	2
1,2,4-Trimethylbenzene	210	J	ug/kg	240	40.	2
1,4-Dioxane	ND		ug/kg	12000	4200	2
p-Diethylbenzene	3500		ug/kg	240	21.	2
p-Ethyltoluene	320		ug/kg	240	46.	2
1,2,4,5-Tetramethylbenzene	13000		ug/kg	240	23.	2
Ethyl ether	ND		ug/kg	240	41.	2
trans-1,4-Dichloro-2-butene	ND		ug/kg	600	170	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	165	Q	70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 16:10
 Analyst: JC
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.7	1.7	1
1,1-Dichloroethane	ND		ug/kg	0.74	0.11	1
Chloroform	0.17	J	ug/kg	1.1	0.10	1
Carbon tetrachloride	ND		ug/kg	0.74	0.17	1
1,2-Dichloropropane	ND		ug/kg	0.74	0.09	1
Dibromochloromethane	ND		ug/kg	0.74	0.10	1
1,1,2-Trichloroethane	ND		ug/kg	0.74	0.20	1
Tetrachloroethene	ND		ug/kg	0.37	0.14	1
Chlorobenzene	ND		ug/kg	0.37	0.09	1
Trichlorofluoromethane	ND		ug/kg	3.0	0.52	1
1,2-Dichloroethane	ND		ug/kg	0.74	0.19	1
1,1,1-Trichloroethane	ND		ug/kg	0.37	0.12	1
Bromodichloromethane	ND		ug/kg	0.37	0.08	1
trans-1,3-Dichloropropene	ND		ug/kg	0.74	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.37	0.12	1
1,3-Dichloropropene, Total	ND		ug/kg	0.37	0.12	1
1,1-Dichloropropene	ND		ug/kg	0.37	0.12	1
Bromoform	ND		ug/kg	3.0	0.18	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.37	0.12	1
Benzene	0.16	J	ug/kg	0.37	0.12	1
Toluene	ND		ug/kg	0.74	0.40	1
Ethylbenzene	11		ug/kg	0.74	0.10	1
Chloromethane	ND		ug/kg	3.0	0.69	1
Bromomethane	ND		ug/kg	1.5	0.43	1
Vinyl chloride	ND		ug/kg	0.74	0.25	1
Chloroethane	ND		ug/kg	1.5	0.34	1
1,1-Dichloroethene	ND		ug/kg	0.74	0.18	1
trans-1,2-Dichloroethene	ND		ug/kg	1.1	0.10	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.37	0.10	1
1,2-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,3-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,4-Dichlorobenzene	ND		ug/kg	1.5	0.13	1
Methyl tert butyl ether	ND		ug/kg	1.5	0.15	1
p/m-Xylene	ND		ug/kg	1.5	0.42	1
o-Xylene	ND		ug/kg	0.74	0.22	1
Xylenes, Total	ND		ug/kg	0.74	0.22	1
cis-1,2-Dichloroethene	ND		ug/kg	0.74	0.13	1
1,2-Dichloroethene, Total	ND		ug/kg	0.74	0.10	1
Dibromomethane	ND		ug/kg	1.5	0.18	1
Styrene	ND		ug/kg	0.74	0.14	1
Dichlorodifluoromethane	ND		ug/kg	7.4	0.68	1
Acetone	4.2	J	ug/kg	7.4	3.6	1
Carbon disulfide	ND		ug/kg	7.4	3.4	1
2-Butanone	ND		ug/kg	7.4	1.6	1
Vinyl acetate	ND		ug/kg	7.4	1.6	1
4-Methyl-2-pentanone	ND		ug/kg	7.4	0.95	1
1,2,3-Trichloropropane	ND		ug/kg	1.5	0.09	1
2-Hexanone	ND		ug/kg	7.4	0.88	1
Bromochloromethane	ND		ug/kg	1.5	0.15	1
2,2-Dichloropropane	ND		ug/kg	1.5	0.15	1
1,2-Dibromoethane	ND		ug/kg	0.74	0.21	1
1,3-Dichloropropane	ND		ug/kg	1.5	0.12	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.37	0.10	1
Bromobenzene	ND		ug/kg	1.5	0.11	1
n-Butylbenzene	1.4		ug/kg	0.74	0.12	1
sec-Butylbenzene	1.1		ug/kg	0.74	0.11	1
tert-Butylbenzene	0.31	J	ug/kg	1.5	0.09	1
o-Chlorotoluene	ND		ug/kg	1.5	0.14	1
p-Chlorotoluene	ND		ug/kg	1.5	0.08	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.2	0.74	1
Hexachlorobutadiene	ND		ug/kg	3.0	0.12	1
Isopropylbenzene	7.7		ug/kg	0.74	0.08	1
p-Isopropyltoluene	0.80		ug/kg	0.74	0.08	1
Naphthalene	16		ug/kg	3.0	0.48	1
Acrylonitrile	ND		ug/kg	3.0	0.85	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
Client ID: RB11_28-30
Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	12		ug/kg	0.74	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.5	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.5	0.20	1
1,3,5-Trimethylbenzene	0.53	J	ug/kg	1.5	0.14	1
1,2,4-Trimethylbenzene	0.62	J	ug/kg	1.5	0.25	1
1,4-Dioxane	ND		ug/kg	74	26.	1
p-Diethylbenzene	1.9		ug/kg	1.5	0.13	1
p-Ethyltoluene	0.83	J	ug/kg	1.5	0.28	1
1,2,4,5-Tetramethylbenzene	2.9		ug/kg	1.5	0.14	1
Ethyl ether	ND		ug/kg	1.5	0.25	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	3.7	1.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 16:36
 Analyst: JC
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	2900	1300	10
1,1-Dichloroethane	ND		ug/kg	570	83.	10
Chloroform	ND		ug/kg	860	80.	10
Carbon tetrachloride	ND		ug/kg	570	130	10
1,2-Dichloropropane	ND		ug/kg	570	72.	10
Dibromochloromethane	ND		ug/kg	570	80.	10
1,1,2-Trichloroethane	ND		ug/kg	570	150	10
Tetrachloroethene	ND		ug/kg	290	110	10
Chlorobenzene	ND		ug/kg	290	73.	10
Trichlorofluoromethane	ND		ug/kg	2300	400	10
1,2-Dichloroethane	ND		ug/kg	570	150	10
1,1,1-Trichloroethane	ND		ug/kg	290	96.	10
Bromodichloromethane	ND		ug/kg	290	62.	10
trans-1,3-Dichloropropene	ND		ug/kg	570	160	10
cis-1,3-Dichloropropene	ND		ug/kg	290	90.	10
1,3-Dichloropropene, Total	ND		ug/kg	290	90.	10
1,1-Dichloropropene	ND		ug/kg	290	91.	10
Bromoform	ND		ug/kg	2300	140	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	290	95.	10
Benzene	2500		ug/kg	290	95.	10
Toluene	360	J	ug/kg	570	310	10
Ethylbenzene	1600		ug/kg	570	81.	10
Chloromethane	ND		ug/kg	2300	530	10
Bromomethane	ND		ug/kg	1100	330	10
Vinyl chloride	ND		ug/kg	570	190	10
Chloroethane	ND		ug/kg	1100	260	10
1,1-Dichloroethene	ND		ug/kg	570	140	10
trans-1,2-Dichloroethene	ND		ug/kg	860	78.	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-07 D

Date Collected: 01/02/19 00:00

Client ID: SODUP03_010219

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	290	78.	10
1,2-Dichlorobenzene	ND		ug/kg	1100	82.	10
1,3-Dichlorobenzene	ND		ug/kg	1100	85.	10
1,4-Dichlorobenzene	ND		ug/kg	1100	98.	10
Methyl tert butyl ether	ND		ug/kg	1100	120	10
p/m-Xylene	1100		ug/kg	1100	320	10
o-Xylene	170	J	ug/kg	570	170	10
Xylenes, Total	1300	J	ug/kg	570	170	10
cis-1,2-Dichloroethene	ND		ug/kg	570	100	10
1,2-Dichloroethene, Total	ND		ug/kg	570	78.	10
Dibromomethane	ND		ug/kg	1100	140	10
Styrene	ND		ug/kg	570	110	10
Dichlorodifluoromethane	ND		ug/kg	5700	520	10
Acetone	ND		ug/kg	5700	2800	10
Carbon disulfide	ND		ug/kg	5700	2600	10
2-Butanone	ND		ug/kg	5700	1300	10
Vinyl acetate	ND		ug/kg	5700	1200	10
4-Methyl-2-pentanone	ND		ug/kg	5700	730	10
1,2,3-Trichloropropane	ND		ug/kg	1100	73.	10
2-Hexanone	ND		ug/kg	5700	680	10
Bromochloromethane	ND		ug/kg	1100	120	10
2,2-Dichloropropane	ND		ug/kg	1100	120	10
1,2-Dibromoethane	ND		ug/kg	570	160	10
1,3-Dichloropropane	ND		ug/kg	1100	96.	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	290	76.	10
Bromobenzene	ND		ug/kg	1100	83.	10
n-Butylbenzene	14000		ug/kg	570	96.	10
sec-Butylbenzene	5300		ug/kg	570	84.	10
tert-Butylbenzene	540	J	ug/kg	1100	68.	10
o-Chlorotoluene	ND		ug/kg	1100	110	10
p-Chlorotoluene	ND		ug/kg	1100	62.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1700	570	10
Hexachlorobutadiene	ND		ug/kg	2300	97.	10
Isopropylbenzene	19000		ug/kg	570	62.	10
p-Isopropyltoluene	710		ug/kg	570	62.	10
Naphthalene	1200	J	ug/kg	2300	370	10
Acrylonitrile	ND		ug/kg	2300	660	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	44000		ug/kg	570	98.	10
1,2,3-Trichlorobenzene	ND		ug/kg	1100	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1100	160	10
1,3,5-Trimethylbenzene	250	J	ug/kg	1100	110	10
1,2,4-Trimethylbenzene	ND		ug/kg	1100	190	10
1,4-Dioxane	ND		ug/kg	57000	20000	10
p-Diethylbenzene	11000		ug/kg	1100	100	10
p-Ethyltoluene	2300		ug/kg	1100	220	10
1,2,4,5-Tetramethylbenzene	36000		ug/kg	1100	110	10
Ethyl ether	ND		ug/kg	1100	200	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	2900	810	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	146	Q	70-130
Dibromofluoromethane	80		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-08
 Client ID: SOTB04_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/03/19 18:47
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-08
 Client ID: SOTB04_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.1	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-08
 Client ID: SOTB04_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/19 10:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1194582-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/03/19 10:18
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1194582-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/03/19 10:18
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1194582-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/19 11:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,05,07 Batch: WG1195272-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	39	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/19 11:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,05,07 Batch: WG1195272-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/06/19 11:06
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,05,07 Batch: WG1195272-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/19 11:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1195274-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.77	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/19 11:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1195274-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/06/19 11:06
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-04,06 Batch: WG1195274-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1194582-3 WG1194582-4								
Methylene chloride	99		98		70-130	1		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	99		100		70-130	1		20
Carbon tetrachloride	90		88		63-132	2		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	96		95		63-130	1		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	86		85		70-130	1		20
Chlorobenzene	98		99		75-130	1		20
Trichlorofluoromethane	92		90		62-150	2		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	91		89		67-130	2		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	85		85		70-130	0		20
cis-1,3-Dichloropropene	90		91		70-130	1		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	100		95		54-136	5		20
1,1,2,2-Tetrachloroethane	120		110		67-130	9		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	69		72		64-130	4		20
Bromomethane	49		48		39-139	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1194582-3 WG1194582-4								
Vinyl chloride	94		93		55-140	1		20
Chloroethane	100		98		55-138	2		20
1,1-Dichloroethene	92		90		61-145	2		20
trans-1,2-Dichloroethene	96		96		70-130	0		20
Trichloroethene	98		97		70-130	1		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		99		70-130	1		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	85		88		63-130	3		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	98		98		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	120		110		64-130	9		20
Acrylonitrile	120		120		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	56		55		36-147	2		20
Acetone	130		130		58-148	0		20
Carbon disulfide	86		86		51-130	0		20
2-Butanone	140	Q	140	Q	63-138	0		20
Vinyl acetate	130		130		70-130	0		20
4-Methyl-2-pentanone	110		110		59-130	0		20
2-Hexanone	120		120		57-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1194582-3 WG1194582-4								
Bromochloromethane	99		100		70-130	1		20
2,2-Dichloropropane	67		64		63-133	5		20
1,2-Dibromoethane	99		100		70-130	1		20
1,3-Dichloropropane	110		110		70-130	0		20
1,1,1,2-Tetrachloroethane	93		94		64-130	1		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	120		110		53-136	9		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	110		110		70-130	0		20
o-Chlorotoluene	110		110		70-130	0		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	92		94		41-144	2		20
Hexachlorobutadiene	100		98		63-130	2		20
Isopropylbenzene	110		110		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	110		110		70-130	0		20
n-Propylbenzene	120		110		69-130	9		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20
1,2,4-Trichlorobenzene	99		99		70-130	0		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
1,4-Dioxane	120		120		56-162	0		20
p-Diethylbenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1194582-3 WG1194582-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	110		100		70-130	10		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	100		100		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	110		112		70-130
Toluene-d8	105		105		70-130
4-Bromofluorobenzene	113		112		70-130
Dibromofluoromethane	98		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05,07 Batch: WG1195272-3 WG1195272-4								
Methylene chloride	97		94		70-130	3		30
1,1-Dichloroethane	102		98		70-130	4		30
Chloroform	102		98		70-130	4		30
Carbon tetrachloride	105		100		70-130	5		30
1,2-Dichloropropane	100		95		70-130	5		30
Dibromochloromethane	104		102		70-130	2		30
1,1,2-Trichloroethane	100		100		70-130	0		30
Tetrachloroethene	108		105		70-130	3		30
Chlorobenzene	105		102		70-130	3		30
Trichlorofluoromethane	96		94		70-139	2		30
1,2-Dichloroethane	99		96		70-130	3		30
1,1,1-Trichloroethane	105		101		70-130	4		30
Bromodichloromethane	102		98		70-130	4		30
trans-1,3-Dichloropropene	104		102		70-130	2		30
cis-1,3-Dichloropropene	102		100		70-130	2		30
1,1-Dichloropropene	107		102		70-130	5		30
Bromoform	106		105		70-130	1		30
1,1,2,2-Tetrachloroethane	101		98		70-130	3		30
Benzene	102		98		70-130	4		30
Toluene	106		103		70-130	3		30
Ethylbenzene	108		104		70-130	4		30
Chloromethane	102		96		52-130	6		30
Bromomethane	98		92		57-147	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05,07 Batch: WG1195272-3 WG1195272-4								
Vinyl chloride	98		93		67-130	5		30
Chloroethane	95		93		50-151	2		30
1,1-Dichloroethene	106		100		65-135	6		30
trans-1,2-Dichloroethene	105		99		70-130	6		30
Trichloroethene	106		100		70-130	6		30
1,2-Dichlorobenzene	108		103		70-130	5		30
1,3-Dichlorobenzene	112		105		70-130	6		30
1,4-Dichlorobenzene	109		104		70-130	5		30
Methyl tert butyl ether	99		98		66-130	1		30
p/m-Xylene	108		105		70-130	3		30
o-Xylene	107		105		70-130	2		30
cis-1,2-Dichloroethene	102		99		70-130	3		30
Dibromomethane	98		97		70-130	1		30
Styrene	108		106		70-130	2		30
Dichlorodifluoromethane	104		95		30-146	9		30
Acetone	96		96		54-140	0		30
Carbon disulfide	98		93		59-130	5		30
2-Butanone	94		94		70-130	0		30
Vinyl acetate	96		95		70-130	1		30
4-Methyl-2-pentanone	94		97		70-130	3		30
1,2,3-Trichloropropane	101		100		68-130	1		30
2-Hexanone	94		96		70-130	2		30
Bromochloromethane	102		99		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05,07 Batch: WG1195272-3 WG1195272-4								
2,2-Dichloropropane	107		102		70-130	5		30
1,2-Dibromoethane	101		102		70-130	1		30
1,3-Dichloropropane	101		101		69-130	0		30
1,1,1,2-Tetrachloroethane	109		105		70-130	4		30
Bromobenzene	112		104		70-130	7		30
n-Butylbenzene	111		106		70-130	5		30
sec-Butylbenzene	112		107		70-130	5		30
tert-Butylbenzene	117		108		70-130	8		30
o-Chlorotoluene	130		123		70-130	6		30
p-Chlorotoluene	112		106		70-130	6		30
1,2-Dibromo-3-chloropropane	100		98		68-130	2		30
Hexachlorobutadiene	107		103		67-130	4		30
Isopropylbenzene	113		108		70-130	5		30
p-Isopropyltoluene	114		108		70-130	5		30
Naphthalene	104		103		70-130	1		30
Acrylonitrile	95		97		70-130	2		30
n-Propylbenzene	115		107		70-130	7		30
1,2,3-Trichlorobenzene	106		102		70-130	4		30
1,2,4-Trichlorobenzene	109		105		70-130	4		30
1,3,5-Trimethylbenzene	113		107		70-130	5		30
1,2,4-Trimethylbenzene	113		107		70-130	5		30
1,4-Dioxane	97		99		65-136	2		30
p-Diethylbenzene	115		107		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05,07 Batch: WG1195272-3 WG1195272-4								
p-Ethyltoluene	113		108		70-130	5		30
1,2,4,5-Tetramethylbenzene	112		107		70-130	5		30
Ethyl ether	101		96		67-130	5		30
trans-1,4-Dichloro-2-butene	104		103		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	89		92		70-130
Toluene-d8	97		99		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	95		95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1195274-3 WG1195274-4								
Methylene chloride	97		94		70-130	3		30
1,1-Dichloroethane	102		98		70-130	4		30
Chloroform	102		98		70-130	4		30
Carbon tetrachloride	105		100		70-130	5		30
1,2-Dichloropropane	100		95		70-130	5		30
Dibromochloromethane	104		102		70-130	2		30
1,1,2-Trichloroethane	100		100		70-130	0		30
Tetrachloroethene	108		105		70-130	3		30
Chlorobenzene	105		102		70-130	3		30
Trichlorofluoromethane	96		94		70-139	2		30
1,2-Dichloroethane	99		96		70-130	3		30
1,1,1-Trichloroethane	105		101		70-130	4		30
Bromodichloromethane	102		98		70-130	4		30
trans-1,3-Dichloropropene	104		102		70-130	2		30
cis-1,3-Dichloropropene	102		100		70-130	2		30
1,1-Dichloropropene	107		102		70-130	5		30
Bromoform	106		105		70-130	1		30
1,1,2,2-Tetrachloroethane	101		98		70-130	3		30
Benzene	102		98		70-130	4		30
Toluene	106		103		70-130	3		30
Ethylbenzene	108		104		70-130	4		30
Chloromethane	102		96		52-130	6		30
Bromomethane	98		92		57-147	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1195274-3 WG1195274-4								
Vinyl chloride	98		93		67-130	5		30
Chloroethane	95		93		50-151	2		30
1,1-Dichloroethene	106		100		65-135	6		30
trans-1,2-Dichloroethene	105		99		70-130	6		30
Trichloroethene	106		100		70-130	6		30
1,2-Dichlorobenzene	108		103		70-130	5		30
1,3-Dichlorobenzene	112		105		70-130	6		30
1,4-Dichlorobenzene	109		104		70-130	5		30
Methyl tert butyl ether	99		98		66-130	1		30
p/m-Xylene	108		105		70-130	3		30
o-Xylene	107		105		70-130	2		30
cis-1,2-Dichloroethene	102		99		70-130	3		30
Dibromomethane	98		97		70-130	1		30
Styrene	108		106		70-130	2		30
Dichlorodifluoromethane	104		95		30-146	9		30
Acetone	96		96		54-140	0		30
Carbon disulfide	98		93		59-130	5		30
2-Butanone	94		94		70-130	0		30
Vinyl acetate	96		95		70-130	1		30
4-Methyl-2-pentanone	94		97		70-130	3		30
1,2,3-Trichloropropane	101		100		68-130	1		30
2-Hexanone	94		96		70-130	2		30
Bromochloromethane	102		99		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1195274-3 WG1195274-4								
2,2-Dichloropropane	107		102		70-130	5		30
1,2-Dibromoethane	101		102		70-130	1		30
1,3-Dichloropropane	101		101		69-130	0		30
1,1,1,2-Tetrachloroethane	109		105		70-130	4		30
Bromobenzene	112		104		70-130	7		30
n-Butylbenzene	111		106		70-130	5		30
sec-Butylbenzene	112		107		70-130	5		30
tert-Butylbenzene	117		108		70-130	8		30
o-Chlorotoluene	130		123		70-130	6		30
p-Chlorotoluene	112		106		70-130	6		30
1,2-Dibromo-3-chloropropane	100		98		68-130	2		30
Hexachlorobutadiene	107		103		67-130	4		30
Isopropylbenzene	113		108		70-130	5		30
p-Isopropyltoluene	114		108		70-130	5		30
Naphthalene	104		103		70-130	1		30
Acrylonitrile	95		97		70-130	2		30
n-Propylbenzene	115		107		70-130	7		30
1,2,3-Trichlorobenzene	106		102		70-130	4		30
1,2,4-Trichlorobenzene	109		105		70-130	4		30
1,3,5-Trimethylbenzene	113		107		70-130	5		30
1,2,4-Trimethylbenzene	113		107		70-130	5		30
1,4-Dioxane	97		99		65-136	2		30
p-Diethylbenzene	115		107		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-04,06 Batch: WG1195274-3 WG1195274-4								
p-Ethyltoluene	113		108		70-130	5		30
1,2,4,5-Tetramethylbenzene	112		107		70-130	5		30
Ethyl ether	101		96		67-130	5		30
trans-1,4-Dichloro-2-butene	104		103		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	89		91		70-130
Toluene-d8	97		99		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	94		95		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
Client ID: RB09_0-2
Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/04/19 17:45
Analyst: SZ
Percent Solids: 96%

Extraction Method: EPA 3546
Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	200		ug/kg	130	17.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	30.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	29.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	5300		ug/kg	100	19.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	150	1
Hexachloroethane	ND		ug/kg	130	27.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	130	J	ug/kg	170	20.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	130	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	58.	1
Butyl benzyl phthalate	ND		ug/kg	170	42.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	57.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-01

Date Collected: 01/02/19 13:40

Client ID: RB09_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	35.	1
Benzo(a)anthracene	2700		ug/kg	100	19.	1
Benzo(a)pyrene	2400		ug/kg	130	41.	1
Benzo(b)fluoranthene	3000		ug/kg	100	28.	1
Benzo(k)fluoranthene	990		ug/kg	100	27.	1
Chrysene	2500		ug/kg	100	18.	1
Acenaphthylene	130		ug/kg	130	26.	1
Anthracene	700		ug/kg	100	33.	1
Benzo(ghi)perylene	1400		ug/kg	130	20.	1
Fluorene	180		ug/kg	170	16.	1
Phenanthrene	3200		ug/kg	100	20.	1
Dibenzo(a,h)anthracene	380		ug/kg	100	19.	1
Indeno(1,2,3-cd)pyrene	1500		ug/kg	130	24.	1
Pyrene	4700		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	380	39.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	32.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	110	J	ug/kg	170	16.	1
2-Methylnaphthalene	53	J	ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	360	63.	1
4-Nitrophenol	ND		ug/kg	240	69.	1
2,4-Dinitrophenol	ND		ug/kg	810	78.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	81.	1
Pentachlorophenol	ND		ug/kg	130	37.	1
Phenol	ND		ug/kg	170	25.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	32.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	250		ug/kg	170	16.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	86		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	80		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 17:19
 Analyst: SZ
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	74	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	330		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	6400		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	140		ug/kg	110	21.	1
Benzo(a)pyrene	110	J	ug/kg	150	46.	1
Benzo(b)fluoranthene	130		ug/kg	110	32.	1
Benzo(k)fluoranthene	44	J	ug/kg	110	30.	1
Chrysene	130		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	100	J	ug/kg	110	37.	1
Benzo(ghi)perylene	82	J	ug/kg	150	22.	1
Fluorene	100	J	ug/kg	190	18.	1
Phenanthrene	400		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	69	J	ug/kg	150	26.	1
Pyrene	320		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	47	J	ug/kg	190	18.	1
2-Methylnaphthalene	7600		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	910	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	27	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		25-120
Phenol-d6	91		10-120
Nitrobenzene-d5	115		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	92		10-136
4-Terphenyl-d14	81		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 16:02
 Analyst: SZ
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	200	19.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	49.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	66.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	ND		ug/kg	200	18.	1
2-Methylnaphthalene	ND		ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	200	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	37.	1
Benzoic Acid	ND		ug/kg	630	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	ND		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	90		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	92		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	85		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 18:10
 Analyst: SZ
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	58	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	17.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	920		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	630		ug/kg	180	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	340		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	410		ug/kg	100	20.	1
Benzo(a)pyrene	350		ug/kg	140	43.	1
Benzo(b)fluoranthene	470		ug/kg	100	30.	1
Benzo(k)fluoranthene	140		ug/kg	100	28.	1
Chrysene	370		ug/kg	100	18.	1
Acenaphthylene	30	J	ug/kg	140	27.	1
Anthracene	230		ug/kg	100	34.	1
Benzo(ghi)perylene	310		ug/kg	140	21.	1
Fluorene	69	J	ug/kg	180	17.	1
Phenanthrene	950		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	64	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	270		ug/kg	140	24.	1
Pyrene	830		ug/kg	100	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	51	J	ug/kg	180	17.	1
2-Methylnaphthalene	720		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	42	J	ug/kg	180	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	96		30-120
2,4,6-Tribromophenol	11		10-136
4-Terphenyl-d14	86		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 16:54
 Analyst: SZ
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	27	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	64	J	ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	1900		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-05

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	33	J	ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	32	J	ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	28	J	ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	26	J	ug/kg	150	22.	1
Fluorene	65	J	ug/kg	190	18.	1
Phenanthrene	100	J	ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	72	J	ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	10000	E	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	112		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	86		10-136
4-Terphenyl-d14	74		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05 D
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/08/19 12:49
 Analyst: JG
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2-Methylnaphthalene	9500		ug/kg	1100	120	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 16:28
 Analyst: SZ
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	220		ug/kg	180	63.	1
Butyl benzyl phthalate	96	J	ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	28	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	260	74.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	88.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	91		25-120
Phenol-d6	90		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	91		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	85		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/04/19 18:36
 Analyst: SZ
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	670		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	16000	E	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	270		ug/kg	120	22.	1
Benzo(a)pyrene	210		ug/kg	150	47.	1
Benzo(b)fluoranthene	250		ug/kg	120	32.	1
Benzo(k)fluoranthene	83	J	ug/kg	120	31.	1
Chrysene	250		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	200		ug/kg	120	38.	1
Benzo(ghi)perylene	140	J	ug/kg	150	23.	1
Fluorene	190		ug/kg	190	19.	1
Phenanthrene	830		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	35	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	120	J	ug/kg	150	27.	1
Pyrene	660		ug/kg	120	19.	1
Biphenyl	130	J	ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	93	J	ug/kg	190	18.	1
2-Methylnaphthalene	18000	E	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	920	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	200	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	40	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	88		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	101		30-120
2,4,6-Tribromophenol	93		10-136
4-Terphenyl-d14	89		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/08/19 12:23
 Analyst: JG
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Naphthalene	21000		ug/kg	960	120	5
2-Methylnaphthalene	19000		ug/kg	1200	120	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/19 20:30
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 01/03/19 16:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1194535-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/19 20:30
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 01/03/19 16:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1194535-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/04/19 20:30
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 01/03/19 16:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1194535-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	95		25-120
Phenol-d6	99		10-120
Nitrobenzene-d5	99		23-120
2-Fluorobiphenyl	110		30-120
2,4,6-Tribromophenol	116		10-136
4-Terphenyl-d14	117		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1194535-2 WG1194535-3								
Acenaphthene	88		90		31-137	2		50
1,2,4-Trichlorobenzene	97		102		38-107	5		50
Hexachlorobenzene	104		109		40-140	5		50
Bis(2-chloroethyl)ether	90		95		40-140	5		50
2-Chloronaphthalene	105		109		40-140	4		50
1,2-Dichlorobenzene	90		92		40-140	2		50
1,3-Dichlorobenzene	88		91		40-140	3		50
1,4-Dichlorobenzene	89		92		28-104	3		50
3,3'-Dichlorobenzidine	65		66		40-140	2		50
2,4-Dinitrotoluene	96		99		40-132	3		50
2,6-Dinitrotoluene	111		116		40-140	4		50
Fluoranthene	106		111		40-140	5		50
4-Chlorophenyl phenyl ether	95		98		40-140	3		50
4-Bromophenyl phenyl ether	102		106		40-140	4		50
Bis(2-chloroisopropyl)ether	87		90		40-140	3		50
Bis(2-chloroethoxy)methane	95		101		40-117	6		50
Hexachlorobutadiene	105		110		40-140	5		50
Hexachlorocyclopentadiene	89		93		40-140	4		50
Hexachloroethane	87		88		40-140	1		50
Isophorone	96		100		40-140	4		50
Naphthalene	96		98		40-140	2		50
Nitrobenzene	90		95		40-140	5		50
NDPA/DPA	100		98		36-157	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1194535-2 WG1194535-3								
n-Nitrosodi-n-propylamine	93		97		32-121	4		50
Bis(2-ethylhexyl)phthalate	102		106		40-140	4		50
Butyl benzyl phthalate	105		111		40-140	6		50
Di-n-butylphthalate	109		112		40-140	3		50
Di-n-octylphthalate	103		110		40-140	7		50
Diethyl phthalate	94		96		40-140	2		50
Dimethyl phthalate	114		117		40-140	3		50
Benzo(a)anthracene	99		104		40-140	5		50
Benzo(a)pyrene	107		112		40-140	5		50
Benzo(b)fluoranthene	107		108		40-140	1		50
Benzo(k)fluoranthene	106		117		40-140	10		50
Chrysene	102		106		40-140	4		50
Acenaphthylene	110		114		40-140	4		50
Anthracene	105		109		40-140	4		50
Benzo(ghi)perylene	108		112		40-140	4		50
Fluorene	96		98		40-140	2		50
Phenanthrene	100		104		40-140	4		50
Dibenzo(a,h)anthracene	109		114		40-140	4		50
Indeno(1,2,3-cd)pyrene	108		112		40-140	4		50
Pyrene	108		112		35-142	4		50
Biphenyl	106	Q	110	Q	54-104	4		50
4-Chloroaniline	54		61		40-140	12		50
2-Nitroaniline	110		116		47-134	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1194535-2 WG1194535-3								
3-Nitroaniline	58		63		26-129	8		50
4-Nitroaniline	86		87		41-125	1		50
Dibenzofuran	93		95		40-140	2		50
2-Methylnaphthalene	100		104		40-140	4		50
1,2,4,5-Tetrachlorobenzene	108		112		40-117	4		50
Acetophenone	93		99		14-144	6		50
2,4,6-Trichlorophenol	113		119		30-130	5		50
p-Chloro-m-cresol	110	Q	117	Q	26-103	6		50
2-Chlorophenol	97		102		25-102	5		50
2,4-Dichlorophenol	110		114		30-130	4		50
2,4-Dimethylphenol	107		110		30-130	3		50
2-Nitrophenol	98		101		30-130	3		50
4-Nitrophenol	104		106		11-114	2		50
2,4-Dinitrophenol	82		83		4-130	1		50
4,6-Dinitro-o-cresol	97		100		10-130	3		50
Pentachlorophenol	93		96		17-109	3		50
Phenol	94	Q	98	Q	26-90	4		50
2-Methylphenol	98		103		30-130.	5		50
3-Methylphenol/4-Methylphenol	99		103		30-130	4		50
2,4,5-Trichlorophenol	122		126		30-130	3		50
Benzoic Acid	60		63		10-110	5		50
Benzyl Alcohol	102		106		40-140	4		50
Carbazole	103		108		54-128	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1194535-2 WG1194535-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
2-Fluorophenol	93		96		25-120
Phenol-d6	99		102		10-120
Nitrobenzene-d5	95		97		23-120
2-Fluorobiphenyl	110		112		30-120
2,4,6-Tribromophenol	115		113		10-136
4-Terphenyl-d14	111		113		18-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 13:44
 Analyst: WR
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.1	2.94	1	A
Aroclor 1221	ND		ug/kg	33.1	3.32	1	A
Aroclor 1232	ND		ug/kg	33.1	7.02	1	A
Aroclor 1242	ND		ug/kg	33.1	4.46	1	A
Aroclor 1248	ND		ug/kg	33.1	4.97	1	A
Aroclor 1254	ND		ug/kg	33.1	3.62	1	A
Aroclor 1260	ND		ug/kg	33.1	6.12	1	A
Aroclor 1262	ND		ug/kg	33.1	4.20	1	A
Aroclor 1268	ND		ug/kg	33.1	3.43	1	A
PCBs, Total	ND		ug/kg	33.1	2.94	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 13:57
 Analyst: WR
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.4	3.32	1	A
Aroclor 1221	ND		ug/kg	37.4	3.75	1	A
Aroclor 1232	ND		ug/kg	37.4	7.93	1	A
Aroclor 1242	ND		ug/kg	37.4	5.04	1	A
Aroclor 1248	ND		ug/kg	37.4	5.61	1	A
Aroclor 1254	ND		ug/kg	37.4	4.09	1	A
Aroclor 1260	ND		ug/kg	37.4	6.91	1	A
Aroclor 1262	ND		ug/kg	37.4	4.75	1	A
Aroclor 1268	ND		ug/kg	37.4	3.87	1	A
PCBs, Total	ND		ug/kg	37.4	3.32	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	83		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 14:09
 Analyst: WR
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.3	3.49	1	A
Aroclor 1221	ND		ug/kg	39.3	3.94	1	A
Aroclor 1232	ND		ug/kg	39.3	8.34	1	A
Aroclor 1242	ND		ug/kg	39.3	5.30	1	A
Aroclor 1248	ND		ug/kg	39.3	5.90	1	A
Aroclor 1254	ND		ug/kg	39.3	4.30	1	A
Aroclor 1260	ND		ug/kg	39.3	7.27	1	A
Aroclor 1262	ND		ug/kg	39.3	5.00	1	A
Aroclor 1268	ND		ug/kg	39.3	4.08	1	A
PCBs, Total	ND		ug/kg	39.3	3.49	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
Client ID: RB11_0-2
Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/04/19 17:03
Analyst: WR
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 01/03/19 14:12
Cleanup Method: EPA 3665A
Cleanup Date: 01/04/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.1	3.11	1	A
Aroclor 1221	ND		ug/kg	35.1	3.51	1	A
Aroclor 1232	ND		ug/kg	35.1	7.43	1	A
Aroclor 1242	ND		ug/kg	35.1	4.73	1	A
Aroclor 1248	ND		ug/kg	35.1	5.26	1	A
Aroclor 1254	18.5	J	ug/kg	35.1	3.84	1	B
Aroclor 1260	11.7	J	ug/kg	35.1	6.48	1	A
Aroclor 1262	ND		ug/kg	35.1	4.45	1	A
Aroclor 1268	ND		ug/kg	35.1	3.63	1	A
PCBs, Total	30.2	J	ug/kg	35.1	3.11	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 17:16
 Analyst: WR
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.3	3.31	1	A
Aroclor 1221	ND		ug/kg	37.3	3.74	1	A
Aroclor 1232	ND		ug/kg	37.3	7.91	1	A
Aroclor 1242	ND		ug/kg	37.3	5.03	1	A
Aroclor 1248	ND		ug/kg	37.3	5.59	1	A
Aroclor 1254	ND		ug/kg	37.3	4.08	1	A
Aroclor 1260	ND		ug/kg	37.3	6.89	1	A
Aroclor 1262	ND		ug/kg	37.3	4.74	1	A
Aroclor 1268	ND		ug/kg	37.3	3.86	1	A
PCBs, Total	ND		ug/kg	37.3	3.31	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/04/19 17:28
 Analyst: WR
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.7	3.08	1	A
Aroclor 1221	ND		ug/kg	34.7	3.48	1	A
Aroclor 1232	ND		ug/kg	34.7	7.36	1	A
Aroclor 1242	ND		ug/kg	34.7	4.68	1	A
Aroclor 1248	ND		ug/kg	34.7	5.21	1	A
Aroclor 1254	ND		ug/kg	34.7	3.80	1	A
Aroclor 1260	ND		ug/kg	34.7	6.42	1	A
Aroclor 1262	ND		ug/kg	34.7	4.41	1	A
Aroclor 1268	ND		ug/kg	34.7	3.60	1	A
PCBs, Total	ND		ug/kg	34.7	3.08	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07
Client ID: SODUP03_010219
Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
Date Received: 01/02/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/04/19 17:40
Analyst: WR
Percent Solids: 85%

Extraction Method: EPA 3546
Extraction Date: 01/03/19 14:12
Cleanup Method: EPA 3665A
Cleanup Date: 01/04/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.6	3.43	1	A
Aroclor 1221	ND		ug/kg	38.6	3.87	1	A
Aroclor 1232	ND		ug/kg	38.6	8.19	1	A
Aroclor 1242	ND		ug/kg	38.6	5.21	1	A
Aroclor 1248	ND		ug/kg	38.6	5.80	1	A
Aroclor 1254	ND		ug/kg	38.6	4.23	1	A
Aroclor 1260	ND		ug/kg	38.6	7.14	1	A
Aroclor 1262	ND		ug/kg	38.6	4.91	1	A
Aroclor 1268	ND		ug/kg	38.6	4.00	1	A
PCBs, Total	ND		ug/kg	38.6	3.43	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	89		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/04/19 16:13
 Analyst: WR

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 14:12
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/04/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-07 Batch: WG1194469-1						
Aroclor 1016	ND		ug/kg	31.3	2.78	A
Aroclor 1221	ND		ug/kg	31.3	3.14	A
Aroclor 1232	ND		ug/kg	31.3	6.64	A
Aroclor 1242	ND		ug/kg	31.3	4.22	A
Aroclor 1248	ND		ug/kg	31.3	4.70	A
Aroclor 1254	ND		ug/kg	31.3	3.43	A
Aroclor 1260	ND		ug/kg	31.3	5.79	A
Aroclor 1262	ND		ug/kg	31.3	3.98	A
Aroclor 1268	ND		ug/kg	31.3	3.25	A
PCBs, Total	ND		ug/kg	31.3	2.78	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	79		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1194469-2 WG1194469-3									
Aroclor 1016	74		78		40-140	5		50	A
Aroclor 1260	69		72		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		72		30-150	A
Decachlorobiphenyl	69		74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		75		30-150	B
Decachlorobiphenyl	79		79		30-150	B



PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 19:09
 Analyst: BM
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.57	0.307	1	A
Lindane	ND		ug/kg	0.653	0.292	1	A
Alpha-BHC	ND		ug/kg	0.653	0.186	1	A
Beta-BHC	ND		ug/kg	1.57	0.595	1	A
Heptachlor	ND		ug/kg	0.784	0.352	1	A
Aldrin	ND		ug/kg	1.57	0.552	1	A
Heptachlor epoxide	ND		ug/kg	2.94	0.882	1	A
Endrin	ND		ug/kg	0.653	0.268	1	A
Endrin aldehyde	ND		ug/kg	1.96	0.686	1	A
Endrin ketone	ND		ug/kg	1.57	0.404	1	A
Dieldrin	ND		ug/kg	0.980	0.490	1	A
4,4'-DDE	ND		ug/kg	1.57	0.363	1	A
4,4'-DDD	ND		ug/kg	1.57	0.559	1	A
4,4'-DDT	ND		ug/kg	2.94	1.26	1	A
Endosulfan I	ND		ug/kg	1.57	0.370	1	A
Endosulfan II	ND		ug/kg	1.57	0.524	1	A
Endosulfan sulfate	ND		ug/kg	0.653	0.311	1	A
Methoxychlor	ND		ug/kg	2.94	0.915	1	A
Toxaphene	ND		ug/kg	29.4	8.23	1	A
cis-Chlordane	ND		ug/kg	1.96	0.546	1	A
trans-Chlordane	ND		ug/kg	1.96	0.518	1	A
Chlordane	ND		ug/kg	12.7	5.20	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-01

Date Collected: 01/02/19 13:40

Client ID: RB09_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	77		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01
 Client ID: RB09_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 11:59
 Analyst: DGM
 Percent Solids: 96%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	172	10.8	1	A
2,4,5-T	ND		ug/kg	172	5.33	1	A
2,4,5-TP (Silvex)	ND		ug/kg	172	4.58	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	134		30-150	A
DCAA	108		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 19:21
 Analyst: BM
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.351	1	A
Lindane	ND		ug/kg	0.746	0.334	1	A
Alpha-BHC	ND		ug/kg	0.746	0.212	1	A
Beta-BHC	ND		ug/kg	1.79	0.679	1	A
Heptachlor	ND		ug/kg	0.895	0.401	1	A
Aldrin	ND		ug/kg	1.79	0.630	1	A
Heptachlor epoxide	ND		ug/kg	3.36	1.01	1	A
Endrin	ND		ug/kg	0.746	0.306	1	A
Endrin aldehyde	ND		ug/kg	2.24	0.783	1	A
Endrin ketone	ND		ug/kg	1.79	0.461	1	A
Dieldrin	ND		ug/kg	1.12	0.560	1	A
4,4'-DDE	ND		ug/kg	1.79	0.414	1	A
4,4'-DDD	ND		ug/kg	1.79	0.639	1	A
4,4'-DDT	ND		ug/kg	3.36	1.44	1	A
Endosulfan I	ND		ug/kg	1.79	0.423	1	A
Endosulfan II	ND		ug/kg	1.79	0.598	1	A
Endosulfan sulfate	ND		ug/kg	0.746	0.355	1	A
Methoxychlor	ND		ug/kg	3.36	1.04	1	A
Toxaphene	ND		ug/kg	33.6	9.40	1	A
cis-Chlordane	ND		ug/kg	2.24	0.624	1	A
trans-Chlordane	ND		ug/kg	2.24	0.591	1	A
Chlordane	ND		ug/kg	14.5	5.93	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-02

Date Collected: 01/02/19 13:45

Client ID: RB09_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	55		30-150	B
2,4,5,6-Tetrachloro-m-xylene	204	Q	30-150	A
Decachlorobiphenyl	76		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02
 Client ID: RB09_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:45
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 12:18
 Analyst: DGM
 Percent Solids: 85%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	193	12.1	1	A
2,4,5-T	ND		ug/kg	193	5.97	1	A
2,4,5-TP (Silvex)	ND		ug/kg	193	5.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	187	Q	30-150	A
DCAA	148		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 19:34
 Analyst: BM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.87	0.367	1	A
Lindane	ND		ug/kg	0.780	0.349	1	A
Alpha-BHC	ND		ug/kg	0.780	0.222	1	A
Beta-BHC	ND		ug/kg	1.87	0.710	1	A
Heptachlor	ND		ug/kg	0.936	0.420	1	A
Aldrin	ND		ug/kg	1.87	0.659	1	A
Heptachlor epoxide	ND		ug/kg	3.51	1.05	1	A
Endrin	ND		ug/kg	0.780	0.320	1	A
Endrin aldehyde	ND		ug/kg	2.34	0.819	1	A
Endrin ketone	ND		ug/kg	1.87	0.482	1	A
Dieldrin	ND		ug/kg	1.17	0.585	1	A
4,4'-DDE	ND		ug/kg	1.87	0.433	1	A
4,4'-DDD	ND		ug/kg	1.87	0.668	1	A
4,4'-DDT	ND		ug/kg	3.51	1.50	1	A
Endosulfan I	ND		ug/kg	1.87	0.442	1	A
Endosulfan II	ND		ug/kg	1.87	0.626	1	A
Endosulfan sulfate	ND		ug/kg	0.780	0.371	1	A
Methoxychlor	ND		ug/kg	3.51	1.09	1	A
Toxaphene	ND		ug/kg	35.1	9.83	1	A
cis-Chlordane	ND		ug/kg	2.34	0.652	1	A
trans-Chlordane	ND		ug/kg	2.34	0.618	1	A
Chlordane	ND		ug/kg	15.2	6.20	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	95		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	74		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03
 Client ID: RB09_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 13:50
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 12:37
 Analyst: DGM
 Percent Solids: 83%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	199	12.5	1	A
2,4,5-T	ND		ug/kg	199	6.17	1	A
2,4,5-TP (Silvex)	ND		ug/kg	199	5.29	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	117		30-150	A
DCAA	102		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 15:35
 Analyst: SL
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.63	0.319	1	A
Lindane	ND		ug/kg	0.679	0.303	1	A
Alpha-BHC	ND		ug/kg	0.679	0.193	1	A
Beta-BHC	ND		ug/kg	1.63	0.618	1	A
Heptachlor	ND		ug/kg	0.814	0.365	1	A
Aldrin	ND		ug/kg	1.63	0.574	1	A
Heptachlor epoxide	ND		ug/kg	3.05	0.916	1	A
Endrin	ND		ug/kg	0.679	0.278	1	A
Endrin aldehyde	ND		ug/kg	2.04	0.713	1	A
Endrin ketone	ND		ug/kg	1.63	0.419	1	A
Dieldrin	0.531	JIP	ug/kg	1.02	0.509	1	B
4,4'-DDE	ND		ug/kg	1.63	0.377	1	A
4,4'-DDD	1.42	J	ug/kg	1.63	0.581	1	B
4,4'-DDT	1.56	JIP	ug/kg	3.05	1.31	1	B
Endosulfan I	ND		ug/kg	1.63	0.385	1	A
Endosulfan II	ND		ug/kg	1.63	0.544	1	A
Endosulfan sulfate	ND		ug/kg	0.679	0.323	1	A
Methoxychlor	ND		ug/kg	3.05	0.950	1	A
Toxaphene	ND		ug/kg	30.5	8.55	1	A
cis-Chlordane	ND		ug/kg	2.04	0.567	1	A
trans-Chlordane	0.935	JIP	ug/kg	2.04	0.538	1	A
Chlordane	ND		ug/kg	13.2	5.40	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-04

Date Collected: 01/02/19 10:30

Client ID: RB11_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	63		30-150	B
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	60		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-04
 Client ID: RB11_0-2
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:30
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 12:55
 Analyst: DGM
 Percent Solids: 93%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	178	11.2	1	A
2,4,5-T	ND		ug/kg	178	5.53	1	A
2,4,5-TP (Silvex)	ND		ug/kg	178	4.75	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	120		30-150	A
DCAA	107		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 13:14
 Analyst: DGM
 Percent Solids: 85%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	193	12.1	1	A
2,4,5-T	ND		ug/kg	193	5.97	1	A
2,4,5-TP (Silvex)	ND		ug/kg	193	5.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	125		30-150	A
DCAA	114		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05 D
 Client ID: RB11_19-21
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:35
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/08/19 17:03
 Analyst: SL
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	91.9	18.0	50	A
Lindane	ND		ug/kg	38.3	17.1	50	A
Alpha-BHC	ND		ug/kg	38.3	10.9	50	A
Beta-BHC	ND		ug/kg	91.9	34.8	50	A
Heptachlor	ND		ug/kg	46.0	20.6	50	A
Aldrin	ND		ug/kg	91.9	32.4	50	A
Heptachlor epoxide	ND		ug/kg	172	51.7	50	A
Endrin	ND		ug/kg	38.3	15.7	50	A
Endrin aldehyde	ND		ug/kg	115	40.2	50	A
Endrin ketone	ND		ug/kg	91.9	23.7	50	A
Dieldrin	ND		ug/kg	57.4	28.7	50	A
4,4'-DDE	ND		ug/kg	91.9	21.2	50	A
4,4'-DDD	ND		ug/kg	91.9	32.8	50	A
4,4'-DDT	ND		ug/kg	172	73.9	50	A
Endosulfan I	ND		ug/kg	91.9	21.7	50	A
Endosulfan II	ND		ug/kg	91.9	30.7	50	A
Endosulfan sulfate	ND		ug/kg	38.3	18.2	50	A
Methoxychlor	ND		ug/kg	172	53.6	50	A
Toxaphene	ND		ug/kg	1720	482.	50	A
cis-Chlordane	ND		ug/kg	115	32.0	50	A
trans-Chlordane	ND		ug/kg	115	30.3	50	A
Chlordane	ND		ug/kg	747	304.	50	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-05 D

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/04/19 16:00
 Analyst: SL
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.334	1	A
Lindane	ND		ug/kg	0.710	0.318	1	A
Alpha-BHC	ND		ug/kg	0.710	0.202	1	A
Beta-BHC	ND		ug/kg	1.70	0.646	1	A
Heptachlor	ND		ug/kg	0.852	0.382	1	A
Aldrin	ND		ug/kg	1.70	0.600	1	A
Heptachlor epoxide	ND		ug/kg	3.20	0.959	1	A
Endrin	ND		ug/kg	0.710	0.291	1	A
Endrin aldehyde	ND		ug/kg	2.13	0.746	1	A
Endrin ketone	ND		ug/kg	1.70	0.439	1	A
Dieldrin	ND		ug/kg	1.06	0.533	1	A
4,4'-DDE	ND		ug/kg	1.70	0.394	1	A
4,4'-DDD	ND		ug/kg	1.70	0.608	1	A
4,4'-DDT	ND		ug/kg	3.20	1.37	1	A
Endosulfan I	ND		ug/kg	1.70	0.403	1	A
Endosulfan II	ND		ug/kg	1.70	0.570	1	A
Endosulfan sulfate	ND		ug/kg	0.710	0.338	1	A
Methoxychlor	ND		ug/kg	3.20	0.994	1	A
Toxaphene	ND		ug/kg	32.0	8.95	1	A
cis-Chlordane	ND		ug/kg	2.13	0.594	1	A
trans-Chlordane	ND	IP	ug/kg	2.13	0.563	1	A
Chlordane	ND		ug/kg	13.8	5.65	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	B
Decachlorobiphenyl	67		30-150	B
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	70		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06
 Client ID: RB11_28-30
 Sample Location: BRONX, NY

Date Collected: 01/02/19 10:40
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/05/19 13:33
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.67	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	125		30-150	A
DCAA	112		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/08/19 17:15
 Analyst: SL
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:47
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	90.0	17.6	50	A
Lindane	ND		ug/kg	37.5	16.8	50	A
Alpha-BHC	ND		ug/kg	37.5	10.6	50	A
Beta-BHC	ND		ug/kg	90.0	34.1	50	A
Heptachlor	ND		ug/kg	45.0	20.2	50	A
Aldrin	ND		ug/kg	90.0	31.7	50	A
Heptachlor epoxide	ND		ug/kg	169	50.6	50	A
Endrin	ND		ug/kg	37.5	15.4	50	A
Endrin aldehyde	ND		ug/kg	112	39.4	50	A
Endrin ketone	ND		ug/kg	90.0	23.2	50	A
Dieldrin	ND		ug/kg	56.2	28.1	50	A
4,4'-DDE	ND		ug/kg	90.0	20.8	50	A
4,4'-DDD	ND		ug/kg	90.0	32.1	50	A
4,4'-DDT	ND		ug/kg	169	72.3	50	A
Endosulfan I	ND		ug/kg	90.0	21.2	50	A
Endosulfan II	ND		ug/kg	90.0	30.0	50	A
Endosulfan sulfate	ND		ug/kg	37.5	17.8	50	A
Methoxychlor	ND		ug/kg	169	52.5	50	A
Toxaphene	ND		ug/kg	1690	472.	50	A
cis-Chlordane	ND		ug/kg	112	31.3	50	A
trans-Chlordane	ND		ug/kg	112	29.7	50	A
Chlordane	ND		ug/kg	731	298.	50	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-07 D

Date Collected: 01/02/19 00:00

Client ID: SODUP03_010219

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-07 D
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/07/19 16:52
 Analyst: DGM
 Percent Solids: 85%
 Methylation Date: 01/04/19 19:15

Extraction Method: EPA 8151A
 Extraction Date: 01/03/19 16:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	958	60.4	5	A
2,4,5-T	ND		ug/kg	958	29.7	5	A
2,4,5-TP (Silvex)	ND		ug/kg	958	25.5	5	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	0	Q	30-150	A
DCAA	0	Q	30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/04/19 15:31
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 01/03/19 12:46
Cleanup Method: EPA 3620B
Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07 Batch: WG1194454-1						
Delta-BHC	ND		ug/kg	1.52	0.298	A
Lindane	ND		ug/kg	0.634	0.283	A
Alpha-BHC	ND		ug/kg	0.634	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.577	A
Heptachlor	ND		ug/kg	0.761	0.341	A
Aldrin	ND		ug/kg	1.52	0.536	A
Heptachlor epoxide	ND		ug/kg	2.85	0.856	A
Endrin	ND		ug/kg	0.634	0.260	A
Endrin aldehyde	ND		ug/kg	1.90	0.666	A
Endrin ketone	ND		ug/kg	1.52	0.392	A
Dieldrin	ND		ug/kg	0.951	0.476	A
4,4'-DDE	ND		ug/kg	1.52	0.352	A
4,4'-DDD	ND		ug/kg	1.52	0.543	A
4,4'-DDT	ND		ug/kg	2.85	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.360	A
Endosulfan II	ND		ug/kg	1.52	0.508	A
Endosulfan sulfate	ND		ug/kg	0.634	0.302	A
Methoxychlor	ND		ug/kg	2.85	0.888	A
Toxaphene	ND		ug/kg	28.5	7.99	A
cis-Chlordane	ND		ug/kg	1.90	0.530	A
trans-Chlordane	ND		ug/kg	1.90	0.502	A
Chlordane	ND		ug/kg	12.4	5.04	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/04/19 15:31
 Analyst: BM

Extraction Method: EPA 3546
 Extraction Date: 01/03/19 12:46
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-07 Batch: WG1194454-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	105		30-150	B
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	100		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8151A
Analytical Date: 01/04/19 11:00
Analyst: KEG

Extraction Method: EPA 8151A
Extraction Date: 01/03/19 16:15

Methylation Date: 01/04/19 10:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-07 Batch: WG1194518-1						
2,4-D	ND		ug/kg	163	10.2	A
2,4,5-T	ND		ug/kg	163	5.04	A
2,4,5-TP (Silvex)	ND		ug/kg	163	4.33	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	98		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1194454-2 WG1194454-3									
Delta-BHC	61		95		30-150	44	Q	30	A
Lindane	63		99		30-150	44	Q	30	A
Alpha-BHC	66		109		30-150	49	Q	30	A
Beta-BHC	63		91		30-150	36	Q	30	A
Heptachlor	67		105		30-150	44	Q	30	A
Aldrin	63		97		30-150	43	Q	30	A
Heptachlor epoxide	62		95		30-150	42	Q	30	A
Endrin	68		105		30-150	43	Q	30	A
Endrin aldehyde	47		74		30-150	45	Q	30	A
Endrin ketone	63		96		30-150	42	Q	30	A
Dieldrin	69		110		30-150	46	Q	30	A
4,4'-DDE	64		93		30-150	37	Q	30	A
4,4'-DDD	64		102		30-150	46	Q	30	A
4,4'-DDT	63		101		30-150	46	Q	30	A
Endosulfan I	61		92		30-150	41	Q	30	A
Endosulfan II	60		94		30-150	44	Q	30	A
Endosulfan sulfate	56		81		30-150	36	Q	30	A
Methoxychlor	56		90		30-150	47	Q	30	A
cis-Chlordane	48		67		30-150	33	Q	30	A
trans-Chlordane	38		63		30-150	50	Q	30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1194454-2 WG1194454-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	61		80		30-150	B
Decachlorobiphenyl	79		97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	58		89		30-150	A
Decachlorobiphenyl	62		94		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-07 Batch: WG1194518-2 WG1194518-3									
2,4-D	133		117		30-150	13		30	A
2,4,5-T	116		114		30-150	2		30	A
2,4,5-TP (Silvex)	87		90		30-150	3		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	114		116		30-150	A
DCAA	106		107		30-150	B



METALS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-01

Date Collected: 01/02/19 13:40

Client ID: RB09_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3430		mg/kg	8.20	2.21	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Antimony, Total	0.402	J	mg/kg	4.10	0.312	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Arsenic, Total	3.98		mg/kg	0.820	0.171	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Barium, Total	97.9		mg/kg	0.820	0.143	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.410	0.027	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Cadmium, Total	0.476	J	mg/kg	0.820	0.080	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Calcium, Total	2320		mg/kg	8.20	2.87	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Chromium, Total	9.35		mg/kg	0.820	0.079	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Cobalt, Total	3.88		mg/kg	1.64	0.136	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Copper, Total	68.2		mg/kg	0.820	0.212	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Iron, Total	11000		mg/kg	4.10	0.741	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Lead, Total	569		mg/kg	4.10	0.220	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Magnesium, Total	1370		mg/kg	8.20	1.26	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Manganese, Total	171		mg/kg	0.820	0.130	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Mercury, Total	0.242		mg/kg	0.066	0.014	1	01/03/19 07:30	01/04/19 18:48	EPA 7471B	1,7471B	EA
Nickel, Total	8.91		mg/kg	2.05	0.198	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Potassium, Total	878		mg/kg	205	11.8	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Selenium, Total	0.566	J	mg/kg	1.64	0.212	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Silver, Total	0.279	J	mg/kg	0.820	0.232	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Sodium, Total	657		mg/kg	164	2.58	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.64	0.258	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Vanadium, Total	11.2		mg/kg	0.820	0.166	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
Zinc, Total	206		mg/kg	4.10	0.240	2	01/03/19 05:00	01/07/19 17:03	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	9.4		mg/kg	0.84	0.84	1		01/07/19 17:03	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-02

Date Collected: 01/02/19 13:45

Client ID: RB09_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4520		mg/kg	9.14	2.47	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.57	0.347	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Arsenic, Total	1.76		mg/kg	0.914	0.190	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Barium, Total	27.0		mg/kg	0.914	0.159	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Beryllium, Total	0.110	J	mg/kg	0.457	0.030	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Cadmium, Total	0.201	J	mg/kg	0.914	0.090	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Calcium, Total	1140		mg/kg	9.14	3.20	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Chromium, Total	7.55		mg/kg	0.914	0.088	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Cobalt, Total	3.60		mg/kg	1.83	0.152	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Copper, Total	6.39		mg/kg	0.914	0.236	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Iron, Total	9900		mg/kg	4.57	0.826	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Lead, Total	42.1		mg/kg	4.57	0.245	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Magnesium, Total	2060		mg/kg	9.14	1.41	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Manganese, Total	74.5		mg/kg	0.914	0.145	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.074	0.016	1	01/03/19 07:30	01/04/19 18:49	EPA 7471B	1,7471B	EA
Nickel, Total	7.07		mg/kg	2.29	0.221	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Potassium, Total	409		mg/kg	229	13.2	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Selenium, Total	0.338	J	mg/kg	1.83	0.236	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.914	0.259	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Sodium, Total	48.1	J	mg/kg	183	2.88	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.83	0.288	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Vanadium, Total	10.3		mg/kg	0.914	0.186	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
Zinc, Total	23.5		mg/kg	4.57	0.268	2	01/03/19 05:00	01/07/19 17:08	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.6		mg/kg	0.94	0.94	1		01/07/19 17:08	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3480		mg/kg	9.45	2.55	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.73	0.359	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Arsenic, Total	1.74		mg/kg	0.945	0.197	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Barium, Total	7.66		mg/kg	0.945	0.164	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Beryllium, Total	0.151	J	mg/kg	0.473	0.031	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Cadmium, Total	0.189	J	mg/kg	0.945	0.093	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Calcium, Total	614		mg/kg	9.45	3.31	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Chromium, Total	6.45		mg/kg	0.945	0.091	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Cobalt, Total	3.52		mg/kg	1.89	0.157	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Copper, Total	5.63		mg/kg	0.945	0.244	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Iron, Total	8480		mg/kg	4.73	0.854	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Lead, Total	3.15	J	mg/kg	4.73	0.253	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Magnesium, Total	1460		mg/kg	9.45	1.46	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Manganese, Total	312		mg/kg	0.945	0.150	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.076	0.016	1	01/03/19 07:30	01/04/19 18:55	EPA 7471B	1,7471B	EA
Nickel, Total	7.29		mg/kg	2.36	0.229	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Potassium, Total	378		mg/kg	236	13.6	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Selenium, Total	0.510	J	mg/kg	1.89	0.244	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.945	0.268	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Sodium, Total	103	J	mg/kg	189	2.98	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.89	0.298	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Vanadium, Total	8.43		mg/kg	0.945	0.192	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
Zinc, Total	16.8		mg/kg	4.73	0.277	2	01/03/19 05:00	01/07/19 17:12	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	6.4		mg/kg	0.96	0.97	1		01/07/19 17:12	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-04

Date Collected: 01/02/19 10:30

Client ID: RB11_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6870		mg/kg	8.46	2.28	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.23	0.322	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Arsenic, Total	4.05		mg/kg	0.846	0.176	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Barium, Total	101		mg/kg	0.846	0.147	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.423	0.028	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Cadmium, Total	0.626	J	mg/kg	0.846	0.083	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Calcium, Total	48400		mg/kg	8.46	2.96	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Chromium, Total	13.9		mg/kg	0.846	0.081	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Cobalt, Total	6.42		mg/kg	1.69	0.140	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Copper, Total	422		mg/kg	0.846	0.218	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Iron, Total	13100		mg/kg	4.23	0.764	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Lead, Total	162		mg/kg	4.23	0.227	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Magnesium, Total	4310		mg/kg	8.46	1.30	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Manganese, Total	173		mg/kg	0.846	0.134	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Mercury, Total	0.235		mg/kg	0.068	0.014	1	01/03/19 07:30	01/04/19 18:57	EPA 7471B	1,7471B	EA
Nickel, Total	16.5		mg/kg	2.12	0.205	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Potassium, Total	2410		mg/kg	212	12.2	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Selenium, Total	0.347	J	mg/kg	1.69	0.218	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.846	0.240	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Sodium, Total	841		mg/kg	169	2.66	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.69	0.266	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Vanadium, Total	21.0		mg/kg	0.846	0.172	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
Zinc, Total	130		mg/kg	4.23	0.248	2	01/03/19 05:00	01/07/19 17:17	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	0.86	0.86	1		01/07/19 17:17	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-05

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4590		mg/kg	9.18	2.48	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.59	0.349	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Arsenic, Total	1.06		mg/kg	0.918	0.191	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Barium, Total	19.4		mg/kg	0.918	0.160	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Beryllium, Total	0.128	J	mg/kg	0.459	0.030	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Cadmium, Total	0.184	J	mg/kg	0.918	0.090	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Calcium, Total	706		mg/kg	9.18	3.21	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Chromium, Total	7.45		mg/kg	0.918	0.088	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Cobalt, Total	3.49		mg/kg	1.84	0.152	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Copper, Total	7.19		mg/kg	0.918	0.237	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Iron, Total	9120		mg/kg	4.59	0.829	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Lead, Total	7.56		mg/kg	4.59	0.246	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Magnesium, Total	1870		mg/kg	9.18	1.41	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Manganese, Total	98.0		mg/kg	0.918	0.146	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.074	0.016	1	01/03/19 07:30	01/04/19 18:59	EPA 7471B	1,7471B	EA
Nickel, Total	7.35		mg/kg	2.30	0.222	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Potassium, Total	415		mg/kg	230	13.2	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Selenium, Total	0.340	J	mg/kg	1.84	0.237	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.918	0.260	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Sodium, Total	40.6	J	mg/kg	184	2.89	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.84	0.289	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Vanadium, Total	10.7		mg/kg	0.918	0.186	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
Zinc, Total	17.0		mg/kg	4.59	0.269	2	01/03/19 05:00	01/07/19 17:46	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.4		mg/kg	0.94	0.94	1		01/07/19 17:46	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5060		mg/kg	8.48	2.29	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.24	0.322	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Arsenic, Total	1.78		mg/kg	0.848	0.176	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Barium, Total	46.6		mg/kg	0.848	0.148	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.424	0.028	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Cadmium, Total	0.237	J	mg/kg	0.848	0.083	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Calcium, Total	1760		mg/kg	8.48	2.97	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Chromium, Total	12.0		mg/kg	0.848	0.081	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Cobalt, Total	6.00		mg/kg	1.70	0.141	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Copper, Total	18.7		mg/kg	0.848	0.219	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Iron, Total	10500		mg/kg	4.24	0.766	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Lead, Total	4.34		mg/kg	4.24	0.227	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Magnesium, Total	2970		mg/kg	8.48	1.31	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Manganese, Total	147		mg/kg	0.848	0.135	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.069	0.015	1	01/03/19 07:30	01/04/19 19:01	EPA 7471B	1,7471B	EA
Nickel, Total	11.7		mg/kg	2.12	0.205	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Potassium, Total	1530		mg/kg	212	12.2	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.70	0.219	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.848	0.240	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Sodium, Total	229		mg/kg	170	2.67	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.70	0.267	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Vanadium, Total	18.1		mg/kg	0.848	0.172	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
Zinc, Total	25.0		mg/kg	4.24	0.248	2	01/03/19 05:00	01/07/19 17:50	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.88	0.88	1		01/07/19 17:50	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-07
 Client ID: SODUP03_010219
 Sample Location: BRONX, NY

Date Collected: 01/02/19 00:00
 Date Received: 01/02/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4170		mg/kg	9.29	2.51	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.64	0.353	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Arsenic, Total	1.99		mg/kg	0.929	0.193	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Barium, Total	12.4		mg/kg	0.929	0.162	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Beryllium, Total	0.093	J	mg/kg	0.464	0.031	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Cadmium, Total	0.158	J	mg/kg	0.929	0.091	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Calcium, Total	724		mg/kg	9.29	3.25	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Chromium, Total	9.01		mg/kg	0.929	0.089	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Cobalt, Total	2.96		mg/kg	1.86	0.154	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Copper, Total	6.48		mg/kg	0.929	0.240	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Iron, Total	7500		mg/kg	4.64	0.839	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Lead, Total	12.0		mg/kg	4.64	0.249	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Magnesium, Total	1770		mg/kg	9.29	1.43	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Manganese, Total	78.9		mg/kg	0.929	0.148	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.074	0.016	1	01/03/19 07:30	01/04/19 19:03	EPA 7471B	1,7471B	EA
Nickel, Total	6.83		mg/kg	2.32	0.225	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Potassium, Total	532		mg/kg	232	13.4	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Selenium, Total	0.316	J	mg/kg	1.86	0.240	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.929	0.263	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Sodium, Total	85.4	J	mg/kg	186	2.93	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.86	0.293	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Vanadium, Total	11.8		mg/kg	0.929	0.188	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
Zinc, Total	17.9		mg/kg	4.64	0.272	2	01/03/19 05:00	01/07/19 17:55	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	9.0		mg/kg	0.94	0.94	1		01/07/19 17:55	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1194294-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	01/03/19 07:30	01/04/19 18:09	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1194304-1										
Aluminum, Total	1.40	J	mg/kg	4.00	1.08	1	01/03/19 05:00	01/07/19 14:53	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Iron, Total	1.63	J	mg/kg	2.00	0.361	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Magnesium, Total	1.31	J	mg/kg	4.00	0.616	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Manganese, Total	0.152	J	mg/kg	0.400	0.064	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Selenium, Total	0.128	J	mg/kg	0.800	0.103	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Sodium, Total	ND		mg/kg	80.0	1.26	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	01/03/19 05:00	01/07/19 13:07	1,6010D	LC



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1194294-2 SRM Lot Number: D102-540								
Mercury, Total	121		-		65-134	-		



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1194304-2 SRM Lot Number: D102-540					
Aluminum, Total	65	-	49-150	-	
Antimony, Total	111	-	1-199	-	
Arsenic, Total	101	-	83-117	-	
Barium, Total	96	-	83-118	-	
Beryllium, Total	93	-	83-116	-	
Cadmium, Total	104	-	83-118	-	
Calcium, Total	86	-	82-118	-	
Chromium, Total	91	-	83-117	-	
Cobalt, Total	96	-	84-116	-	
Copper, Total	91	-	84-116	-	
Iron, Total	80	-	61-139	-	
Lead, Total	97	-	82-118	-	
Magnesium, Total	80	-	76-124	-	
Manganese, Total	92	-	82-118	-	
Nickel, Total	97	-	83-117	-	
Potassium, Total	76	-	70-130	-	
Selenium, Total	98	-	79-121	-	
Silver, Total	97	-	80-120	-	
Sodium, Total	99	-	74-126	-	
Thallium, Total	99	-	81-119	-	
Vanadium, Total	91	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1194304-2 SRM Lot Number: D102-540					
Zinc, Total	93	-	81-118	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

<u>Parameter</u>	<u>Native Sample</u>	<u>MS Added</u>	<u>MS Found</u>	<u>MS %Recovery</u>	<u>Qual</u>	<u>MSD Found</u>	<u>MSD %Recovery</u>	<u>Qual</u>	<u>Recovery Limits</u>	<u>RPD</u>	<u>Qual</u>	<u>RPD Limits</u>
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194294-3 QC Sample: L1852427-05 Client ID: MS Sample												
Mercury, Total	0.132	0.144	0.351	152	Q	-	-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-3 QC Sample: L1852427-05 Client ID: MS Sample									
Aluminum, Total	19600	180	21700	1160	Q	-	75-125	-	20
Antimony, Total	ND	45.1	23.4	52	Q	-	75-125	-	20
Arsenic, Total	5.34	10.8	16.9	107		-	75-125	-	20
Barium, Total	186	180	410	124		-	75-125	-	20
Beryllium, Total	ND	4.51	3.10	69	Q	-	75-125	-	20
Cadmium, Total	0.746J	4.6	4.74	103		-	75-125	-	20
Calcium, Total	45000	902	48300	366	Q	-	75-125	-	20
Chromium, Total	31.9	18	53.5	120		-	75-125	-	20
Cobalt, Total	7.64	45.1	43.3	79		-	75-125	-	20
Copper, Total	23.1	22.5	36.0	57	Q	-	75-125	-	20
Iron, Total	13900	90.2	14500	665	Q	-	75-125	-	20
Lead, Total	67.2	46	130	136	Q	-	75-125	-	20
Magnesium, Total	39200	902	39200	0	Q	-	75-125	-	20
Manganese, Total	306	45.1	379	162	Q	-	75-125	-	20
Nickel, Total	12.7	45.1	49.7	82		-	75-125	-	20
Potassium, Total	1240	902	2080	93		-	75-125	-	20
Selenium, Total	0.404J	10.8	10.4	96		-	75-125	-	20
Silver, Total	ND	27	26.6	98		-	75-125	-	20
Sodium, Total	906	902	1840	104		-	75-125	-	20
Thallium, Total	ND	10.8	6.65	61	Q	-	75-125	-	20
Vanadium, Total	41.3	45.1	73.8	72	Q	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits	
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-3 QC Sample: L1852427-05 Client ID: MS Sample										
Zinc, Total	127	45.1	209	182	Q	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194294-4 QC Sample: L1852427-05 Client ID: DUP Sample						
Mercury, Total	0.132	0.198	mg/kg	40	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-4 QC Sample: L1852427-05 Client ID: DUP Sample					
Antimony, Total	ND	ND	mg/kg	NC	20
Arsenic, Total	5.34	5.28	mg/kg	1	20
Barium, Total	186	188	mg/kg	1	20
Beryllium, Total	ND	ND	mg/kg	NC	20
Cadmium, Total	0.746J	0.701J	mg/kg	NC	20
Calcium, Total	45000	45700	mg/kg	2	20
Chromium, Total	31.9	28.9	mg/kg	10	20
Cobalt, Total	7.64	7.26	mg/kg	5	20
Copper, Total	23.1	15.5	mg/kg	39	Q 20
Iron, Total	13900	12900	mg/kg	7	20
Lead, Total	67.2	65.8	mg/kg	2	20
Magnesium, Total	39200	35600	mg/kg	10	20
Manganese, Total	306	341	mg/kg	11	20
Nickel, Total	12.7	11.0	mg/kg	14	20
Potassium, Total	1240	1090	mg/kg	13	20
Selenium, Total	0.404J	1.20J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	906	936	mg/kg	3	20
Thallium, Total	ND	ND	mg/kg	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-4 QC Sample: L1852427-05 Client ID: DUP Sample					
Vanadium, Total	41.3	31.8	mg/kg	26	Q 20
Zinc, Total	127	131	mg/kg	3	20
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1194304-4 QC Sample: L1852427-05 Client ID: DUP Sample					
Aluminum, Total	19600	20600	mg/kg	5	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-01

Date Collected: 01/02/19 13:40

Client ID: RB09_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.7		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/03/19 12:15	01/03/19 15:14	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.836	0.167	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-02

Date Collected: 01/02/19 13:45

Client ID: RB09_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.1		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	01/03/19 12:15	01/03/19 15:20	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.940	0.188	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-03

Date Collected: 01/02/19 13:50

Client ID: RB09_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.9		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	01/03/19 12:15	01/03/19 15:21	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.965	0.193	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-04

Date Collected: 01/02/19 10:30

Client ID: RB11_0-2

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.6		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/03/19 12:15	01/03/19 15:22	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.864	0.173	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-05

Date Collected: 01/02/19 10:35

Client ID: RB11_19-21

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.9		%	0.100	NA	1	-	01/04/19 13:06	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	01/03/19 12:15	01/03/19 15:23	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.942	0.188	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

SAMPLE RESULTS

Lab ID: L1900156-06

Date Collected: 01/02/19 10:40

Client ID: RB11_28-30

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.7		%	0.100	NA	1	-	01/04/19 13:19	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/03/19 12:15	01/03/19 15:24	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.882	0.176	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**SAMPLE RESULTS**

Lab ID: L1900156-07

Date Collected: 01/02/19 00:00

Client ID: SODUP03_010219

Date Received: 01/02/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.7		%	0.100	NA	1	-	01/04/19 13:19	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/03/19 12:15	01/03/19 15:25	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.944	0.189	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900156

Project Number: 170487001

Report Date: 01/09/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-07 Batch: WG1194320-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	01/03/19 07:20	01/03/19 13:44	1,7196A	NH
General Chemistry - Westborough Lab for sample(s): 01-07 Batch: WG1194383-1										
Cyanide, Total	ND		mg/kg	0.93	0.20	1	01/03/19 12:15	01/03/19 14:56	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-07 Batch: WG1194320-2								
Chromium, Hexavalent	97		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-07 Batch: WG1194383-2 WG1194383-3								
Cyanide, Total	68	Q	72	Q	80-120	11		35

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1194320-4 QC Sample: L1900156-04 Client ID: RB11_0-2												
Chromium, Hexavalent	ND	1460	1300	89		-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1194383-4 WG1194383-5 QC Sample: L1900156-01 Client ID: RB09_0-2												
Cyanide, Total	ND	10	9.6	95		8.4	81		75-125	13		35

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900156

Report Date: 01/09/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1194320-6 QC Sample: L1900156-04 Client ID: RB11_0-2						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1194804-1 QC Sample: L1852427-05 Client ID: DUP Sample						
Solids, Total	87.3	87.0	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 06-07 QC Batch ID: WG1194806-1 QC Sample: L1900160-01 Client ID: DUP Sample						
Solids, Total	85.7	87.1	%	2		20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01091916:22
Lab Number: L1900156
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Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900156-01A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-01B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-01C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-01D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-01E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-01F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-01G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-02A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-02B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-02C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-02D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-02E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-02F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-02G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-03A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE. + E. 146TH ST.

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900156-03B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-03C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-03D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-03E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-03F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-03G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-04A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-04B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-04C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-04D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-04E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-04F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-04G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-05A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-05B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-05C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-05D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900156**Project Number:** 170487001**Report Date:** 01/09/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900156-05E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-05F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-05G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-06A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-06B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-06C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-06D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-06E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-06F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-06G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-07A	Vial MeOH preserved	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1900156-07B	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-07C	Vial water preserved	A	NA		3.2	Y	Absent	03-JAN-19 00:41	NYTCL-8260HLW(14)
L1900156-07D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900156-07E	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-07F	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1900156-07G	Glass 500ml/16oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900156-08A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900156-08B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900156
Report Date: 01/09/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

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Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


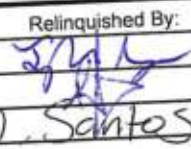
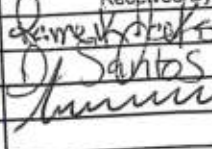
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

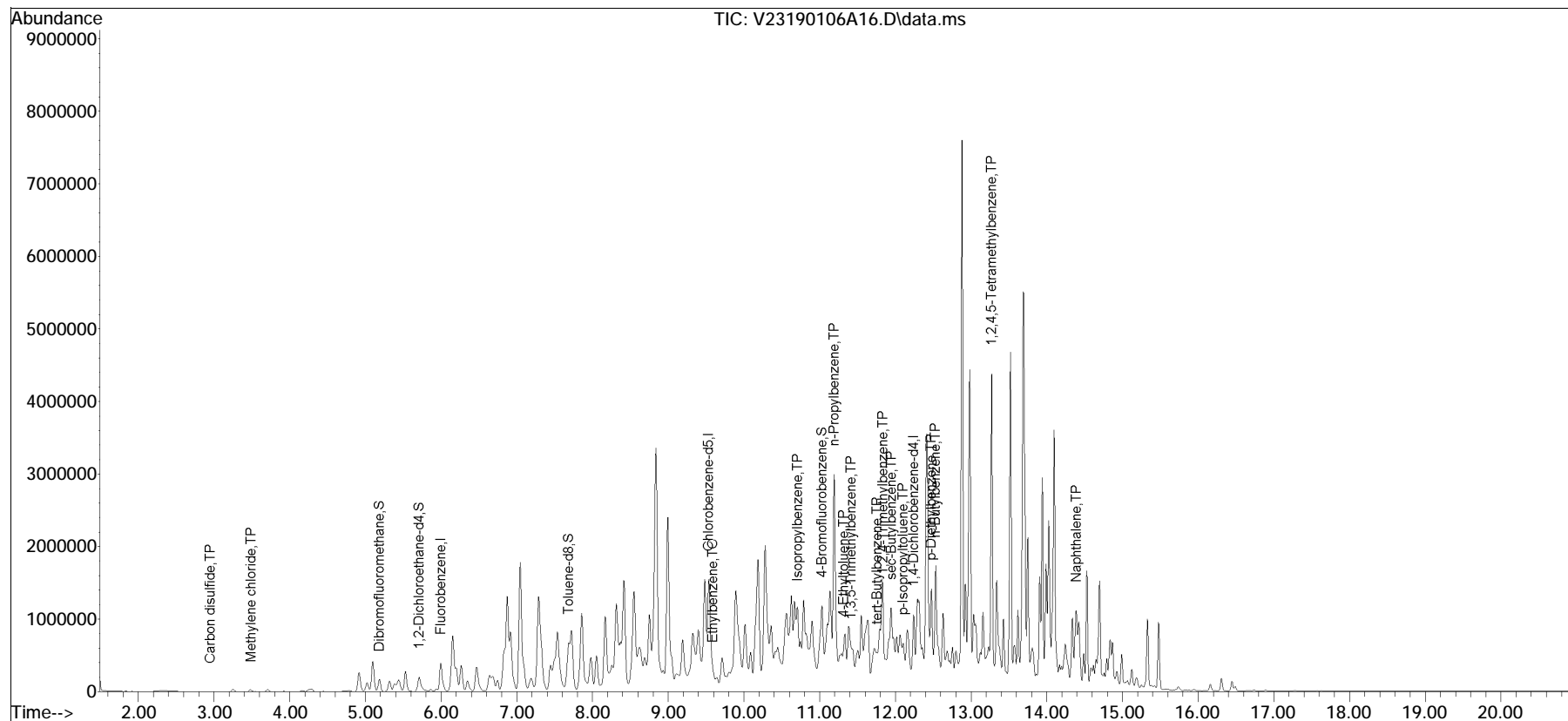
 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab 1/3/19	ALPHA Job # L1900156																																																																																																																																																			
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other																																																																																																																																																			
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #																																																																																																																																																			
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)																																																																																																																																																			
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.																																																																																																																																																							
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">Part 375/TCL VOCs</th> <th rowspan="2">Part 375/TCL SVOCs</th> <th rowspan="2">Part 375/TCL PCBs</th> <th rowspan="2">Pesticides</th> <th rowspan="2">Herbicides</th> <th rowspan="2">TAL Metals</th> <th rowspan="2">Hex Chromium</th> <th rowspan="2">Total Cyanide</th> <th rowspan="2">Sample Specific Comments</th> <th rowspan="2">Total Bottles</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>02 156-01</td> <td>RB09-0-2</td> <td>1/2/19</td> <td>1340</td> <td>507</td> <td>JD</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>02</td> <td>RB09-19-21</td> <td></td> <td>1345</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>03</td> <td>RB09-28-30</td> <td></td> <td>1340</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>04</td> <td>RB11-0-2</td> <td></td> <td>1030</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>05</td> <td>RB11-19-21</td> <td></td> <td>1035</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>06</td> <td>RB11-28-30</td> <td></td> <td>1040</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>07</td> <td>SODP03-010219</td> <td></td> <td>-</td> <td>AQ</td> <td>JD</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>08</td> <td>SOTB04-010219</td> <td></td> <td>-</td> <td></td> <td>JD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total Cyanide	Sample Specific Comments	Total Bottles	Date	Time	02 156-01	RB09-0-2	1/2/19	1340	507	JD	X	X	X	X	X	X	X	X			02	RB09-19-21		1345		JD											03	RB09-28-30		1340		JD											04	RB11-0-2		1030		JD											05	RB11-19-21		1035		JD											06	RB11-28-30		1040		JD											07	SODP03-010219		-	AQ	JD	X										08	SOTB04-010219		-		JD										
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Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015																																																																																																																																																			
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Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)																																																																																																																																																							

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA123\2019\190106A\
 Data File : V23190106A16.D
 Acq On : 06 Jan 2019 15:45
 Operator : VOA123:JC
 Sample : 11900156-05D,31H,5.72,5,0.050,,a
 Misc : WG1195272,ICAL15371
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 06 18:36:18 2019
 Quant Method : I:\VOLATILES\VOA123\2019\190106A\V123_190103D_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jan 04 09:22:26 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90106A\V23190106A02.D•

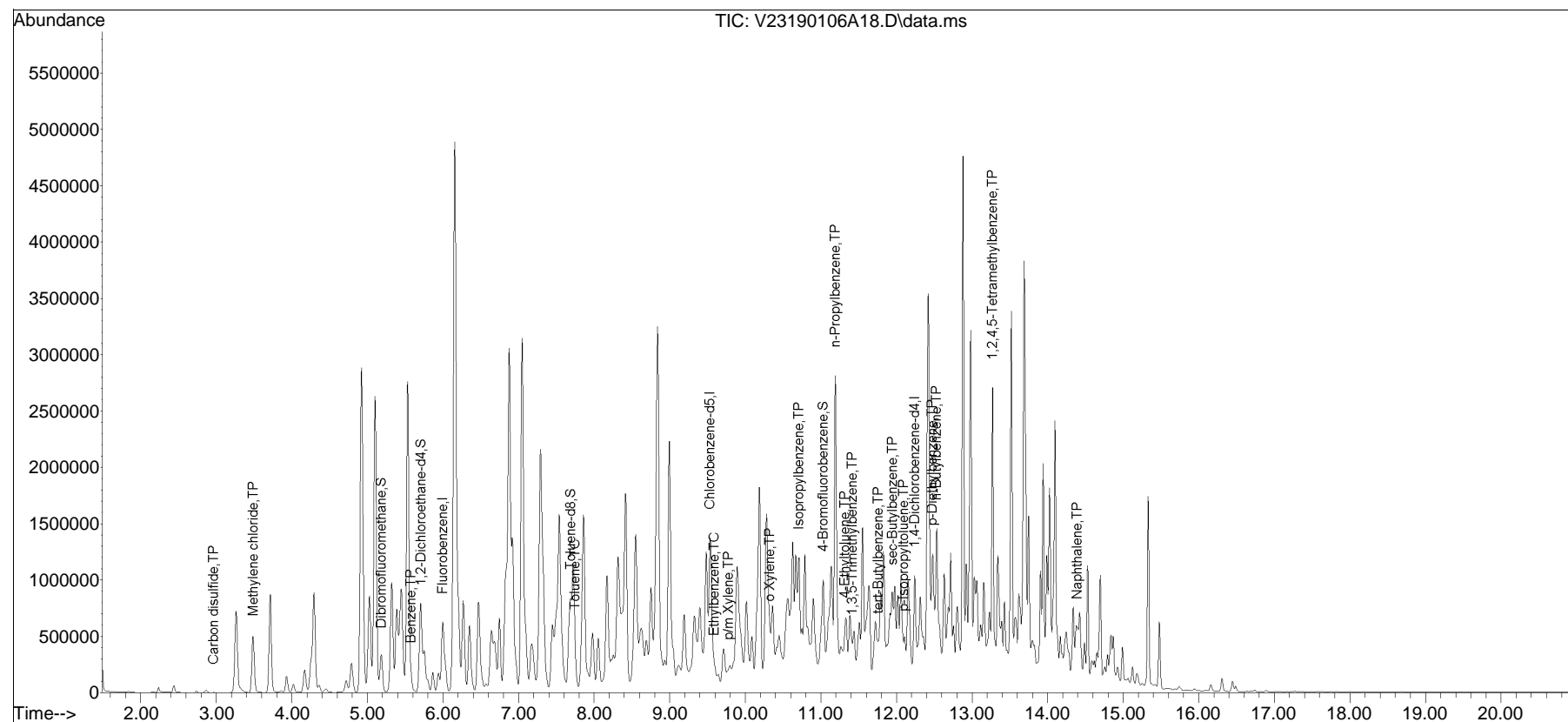


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA123\2019\190106A\
 Data File : V23190106A18.D
 Acq On : 06 Jan 2019 16:36
 Operator : VOA123:JC
 Sample : 11900156-07D,31H,6.11,5,0.010,,a
 Misc : WG1195272,ICAL15371
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 06 18:42:06 2019
 Quant Method : I:\VOLATILES\VOA123\2019\190106A\V123_190103D_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jan 04 09:22:26 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90106A\V23190106A02.D•





ANALYTICAL REPORT

Lab Number:	L1900324
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/10/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900324-01	RB21_0-2	SOIL	BRONX, NY	01/03/19 11:30	01/03/19
L1900324-02	RB21_2-4	SOIL	BRONX, NY	01/03/19 11:35	01/03/19
L1900324-03	RB21_18-20	SOIL	BRONX, NY	01/03/19 11:40	01/03/19
L1900324-04	RB22_0-2	SOIL	BRONX, NY	01/03/19 13:00	01/03/19
L1900324-05	RB22_3-5	SOIL	BRONX, NY	01/03/19 13:05	01/03/19
L1900324-06	RB19_0-2	SOIL	BRONX, NY	01/03/19 14:00	01/03/19
L1900324-07	RB19_20-22	SOIL	BRONX, NY	01/03/19 14:05	01/03/19
L1900324-08	RB19_24-25	SOIL	BRONX, NY	01/03/19 14:10	01/03/19
L1900324-09	SOTB05_010319	WATER	BRONX, NY	01/03/19 00:00	01/03/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Semivolatile Organics

L1900324-07: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

The WG1194798-4/-5 MS/MSD recoveries, performed on L1900324-02, is below the acceptance criteria for benzoic acid (0%/0%) due to the concentration of this compound falling below the reported detection limit.

PCBs

L1900324-07: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

Total Metals

L1900324-01 through -08: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1194873-3 MS recoveries, performed on L1900324-02, are outside the acceptance criteria for antimony (MS at 74%), arsenic (MS at 41%), chromium (MSD at 74%), potassium (MS at 138%), and thallium (70%/69%). A post digestion spike was performed and was within acceptance criteria.

The WG1194873-3/-4 MS/MSD recoveries for aluminum (0%/0%), calcium (2580%/2410%), copper (MS at 63%), lead (MSD at 22%), magnesium (304%/64%), manganese (MS at 200%), and zinc (MSD at 60%), performed on L1900324-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1194873-3/-4 MS/MSD recoveries for iron (16300%/0%), performed on L1900324-02, does not apply

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Case Narrative (continued)

because the sample concentration is greater than four times the spike amount added.

The WG1194873-4 MS/MSD RPDs for arsenic (34%), iron (55%), and magnesium (31%), performed on L1900324-02, are above the acceptance criteria.

The WG1195001-4 MSD recovery, performed on L1900324-02, is outside the acceptance criteria for mercury (127%). A post digestion spike was performed and was within acceptance criteria.

Cyanide, Total

The WG1194787-2/-3 LCS/LCSD recoveries (48%/46%), associated with L1900324-01 through -08, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/10/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 15:47
 Analyst: AD
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	0.21	J	ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.76	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.4	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.4	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
Client ID: RB21_0-2
Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	11		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.71	1
Acrylonitrile	ND		ug/kg	4.4	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
Client ID: RB21_0-2
Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.19	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 16:13
 Analyst: AD
 Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.79	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.57	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	ND		ug/kg	1.1	0.62	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.3	0.66	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-02

Date Collected: 01/03/19 11:35

Client ID: RB21_2-4

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.3	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.57	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.5	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.5	0.74	1
Acrylonitrile	ND		ug/kg	4.5	1.3	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
Client ID: RB21_2-4
Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	110	40.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.7	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 16:39
 Analyst: AD
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	3.9	1.8	1
1,1-Dichloroethane	ND		ug/kg	0.77	0.11	1
Chloroform	ND		ug/kg	1.2	0.11	1
Carbon tetrachloride	ND		ug/kg	0.77	0.18	1
1,2-Dichloropropane	ND		ug/kg	0.77	0.10	1
Dibromochloromethane	ND		ug/kg	0.77	0.11	1
1,1,2-Trichloroethane	ND		ug/kg	0.77	0.21	1
Tetrachloroethene	ND		ug/kg	0.39	0.15	1
Chlorobenzene	ND		ug/kg	0.39	0.10	1
Trichlorofluoromethane	ND		ug/kg	3.1	0.54	1
1,2-Dichloroethane	ND		ug/kg	0.77	0.20	1
1,1,1-Trichloroethane	ND		ug/kg	0.39	0.13	1
Bromodichloromethane	ND		ug/kg	0.39	0.08	1
trans-1,3-Dichloropropene	ND		ug/kg	0.77	0.21	1
cis-1,3-Dichloropropene	ND		ug/kg	0.39	0.12	1
1,3-Dichloropropene, Total	ND		ug/kg	0.39	0.12	1
1,1-Dichloropropene	ND		ug/kg	0.39	0.12	1
Bromoform	ND		ug/kg	3.1	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.39	0.13	1
Benzene	ND		ug/kg	0.39	0.13	1
Toluene	ND		ug/kg	0.77	0.42	1
Ethylbenzene	ND		ug/kg	0.77	0.11	1
Chloromethane	ND		ug/kg	3.1	0.72	1
Bromomethane	ND		ug/kg	1.5	0.45	1
Vinyl chloride	ND		ug/kg	0.77	0.26	1
Chloroethane	ND		ug/kg	1.5	0.35	1
1,1-Dichloroethene	ND		ug/kg	0.77	0.18	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.10	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.39	0.10	1
1,2-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,3-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,4-Dichlorobenzene	ND		ug/kg	1.5	0.13	1
Methyl tert butyl ether	ND		ug/kg	1.5	0.16	1
p/m-Xylene	ND		ug/kg	1.5	0.43	1
o-Xylene	ND		ug/kg	0.77	0.22	1
Xylenes, Total	ND		ug/kg	0.77	0.22	1
cis-1,2-Dichloroethene	ND		ug/kg	0.77	0.14	1
1,2-Dichloroethene, Total	ND		ug/kg	0.77	0.10	1
Dibromomethane	ND		ug/kg	1.5	0.18	1
Styrene	ND		ug/kg	0.77	0.15	1
Dichlorodifluoromethane	ND		ug/kg	7.7	0.71	1
Acetone	7.0	J	ug/kg	7.7	3.7	1
Carbon disulfide	ND		ug/kg	7.7	3.5	1
2-Butanone	ND		ug/kg	7.7	1.7	1
Vinyl acetate	ND		ug/kg	7.7	1.7	1
4-Methyl-2-pentanone	ND		ug/kg	7.7	0.99	1
1,2,3-Trichloropropane	ND		ug/kg	1.5	0.10	1
2-Hexanone	ND		ug/kg	7.7	0.91	1
Bromochloromethane	ND		ug/kg	1.5	0.16	1
2,2-Dichloropropane	ND		ug/kg	1.5	0.16	1
1,2-Dibromoethane	ND		ug/kg	0.77	0.22	1
1,3-Dichloropropane	ND		ug/kg	1.5	0.13	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.39	0.10	1
Bromobenzene	ND		ug/kg	1.5	0.11	1
n-Butylbenzene	ND		ug/kg	0.77	0.13	1
sec-Butylbenzene	ND		ug/kg	0.77	0.11	1
tert-Butylbenzene	ND		ug/kg	1.5	0.09	1
o-Chlorotoluene	ND		ug/kg	1.5	0.15	1
p-Chlorotoluene	ND		ug/kg	1.5	0.08	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.3	0.77	1
Hexachlorobutadiene	ND		ug/kg	3.1	0.13	1
Isopropylbenzene	ND		ug/kg	0.77	0.08	1
p-Isopropyltoluene	ND		ug/kg	0.77	0.08	1
Naphthalene	ND		ug/kg	3.1	0.50	1
Acrylonitrile	ND		ug/kg	3.1	0.89	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
Client ID: RB21_18-20
Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.77	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.5	0.25	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.5	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.5	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.5	0.26	1
1,4-Dioxane	ND		ug/kg	77	27.	1
p-Diethylbenzene	ND		ug/kg	1.5	0.14	1
p-Ethyltoluene	ND		ug/kg	1.5	0.30	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.5	0.15	1
Ethyl ether	ND		ug/kg	1.5	0.26	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	3.9	1.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 17:04
 Analyst: AD
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.13	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.75	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.54	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.58	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.1	0.62	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.1	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-04

Date Collected: 01/03/19 13:00

Client ID: RB22_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.22	1
p/m-Xylene	ND		ug/kg	2.1	0.60	1
o-Xylene	ND		ug/kg	1.1	0.31	1
Xylenes, Total	ND		ug/kg	1.1	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.1	0.26	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.98	1
Acetone	14		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.54	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.1	0.13	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.3	0.18	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.3	0.70	1
Acrylonitrile	ND		ug/kg	4.3	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.36	1
1,4-Dioxane	ND		ug/kg	110	38.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.19	1
p-Ethyltoluene	ND		ug/kg	2.1	0.41	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.37	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.4	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	102		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 17:30
 Analyst: AD
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.3	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	0.20	J	ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.53	0.21	1
Chlorobenzene	ND		ug/kg	0.53	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.73	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.53	0.18	1
Bromodichloromethane	ND		ug/kg	0.53	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.53	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.53	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.53	0.17	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.53	0.18	1
Benzene	ND		ug/kg	0.53	0.18	1
Toluene	ND		ug/kg	1.0	0.57	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.98	1
Bromomethane	0.82	J	ug/kg	2.1	0.61	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.48	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.53	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.59	1
o-Xylene	ND		ug/kg	1.0	0.31	1
Xylenes, Total	ND		ug/kg	1.0	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.0	0.21	1
Dichlorodifluoromethane	ND		ug/kg	10	0.96	1
Acetone	5.3	J	ug/kg	10	5.1	1
Carbon disulfide	ND		ug/kg	10	4.8	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.53	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.18	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.2	0.18	1
Isopropylbenzene	ND		ug/kg	1.0	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.12	1
Naphthalene	ND		ug/kg	4.2	0.69	1
Acrylonitrile	ND		ug/kg	4.2	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	100	37.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.19	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.36	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.3	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 17:56
 Analyst: AD
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.12	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	0.95		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.94	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
Acrylonitrile	ND		ug/kg	4.0	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	100	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.39	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/08/19 18:42
 Analyst: AD
 Percent Solids: 57%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	710	330	1
1,1-Dichloroethane	ND		ug/kg	140	21.	1
Chloroform	ND		ug/kg	210	20.	1
Carbon tetrachloride	ND		ug/kg	140	33.	1
1,2-Dichloropropane	ND		ug/kg	140	18.	1
Dibromochloromethane	ND		ug/kg	140	20.	1
1,1,2-Trichloroethane	ND		ug/kg	140	38.	1
Tetrachloroethene	ND		ug/kg	71	28.	1
Chlorobenzene	ND		ug/kg	71	18.	1
Trichlorofluoromethane	ND		ug/kg	570	99.	1
1,2-Dichloroethane	ND		ug/kg	140	37.	1
1,1,1-Trichloroethane	ND		ug/kg	71	24.	1
Bromodichloromethane	ND		ug/kg	71	16.	1
trans-1,3-Dichloropropene	ND		ug/kg	140	39.	1
cis-1,3-Dichloropropene	ND		ug/kg	71	22.	1
1,3-Dichloropropene, Total	ND		ug/kg	71	22.	1
1,1-Dichloropropene	ND		ug/kg	71	23.	1
Bromoform	ND		ug/kg	570	35.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	71	24.	1
Benzene	ND		ug/kg	71	24.	1
Toluene	ND		ug/kg	140	78.	1
Ethylbenzene	24	J	ug/kg	140	20.	1
Chloromethane	ND		ug/kg	570	130	1
Bromomethane	ND		ug/kg	280	83.	1
Vinyl chloride	ND		ug/kg	140	48.	1
Chloroethane	ND		ug/kg	280	64.	1
1,1-Dichloroethene	ND		ug/kg	140	34.	1
trans-1,2-Dichloroethene	ND		ug/kg	210	20.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-07

Date Collected: 01/03/19 14:05

Client ID: RB19_20-22

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	71	20.	1
1,2-Dichlorobenzene	ND		ug/kg	280	20.	1
1,3-Dichlorobenzene	ND		ug/kg	280	21.	1
1,4-Dichlorobenzene	ND		ug/kg	280	24.	1
Methyl tert butyl ether	ND		ug/kg	280	29.	1
p/m-Xylene	240	J	ug/kg	280	80.	1
o-Xylene	66	J	ug/kg	140	42.	1
Xylenes, Total	310	J	ug/kg	140	42.	1
cis-1,2-Dichloroethene	ND		ug/kg	140	25.	1
1,2-Dichloroethene, Total	ND		ug/kg	140	20.	1
Dibromomethane	ND		ug/kg	280	34.	1
Styrene	ND		ug/kg	140	28.	1
Dichlorodifluoromethane	ND		ug/kg	1400	130	1
Acetone	ND		ug/kg	1400	690	1
Carbon disulfide	ND		ug/kg	1400	650	1
2-Butanone	ND		ug/kg	1400	320	1
Vinyl acetate	ND		ug/kg	1400	310	1
4-Methyl-2-pentanone	ND		ug/kg	1400	180	1
1,2,3-Trichloropropane	ND		ug/kg	280	18.	1
2-Hexanone	ND		ug/kg	1400	170	1
Bromochloromethane	ND		ug/kg	280	29.	1
2,2-Dichloropropane	ND		ug/kg	280	29.	1
1,2-Dibromoethane	ND		ug/kg	140	40.	1
1,3-Dichloropropane	ND		ug/kg	280	24.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	71	19.	1
Bromobenzene	ND		ug/kg	280	21.	1
n-Butylbenzene	33	J	ug/kg	140	24.	1
sec-Butylbenzene	61	J	ug/kg	140	21.	1
tert-Butylbenzene	ND		ug/kg	280	17.	1
o-Chlorotoluene	ND		ug/kg	280	27.	1
p-Chlorotoluene	ND		ug/kg	280	15.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	430	140	1
Hexachlorobutadiene	ND		ug/kg	570	24.	1
Isopropylbenzene	43	J	ug/kg	140	16.	1
p-Isopropyltoluene	16	J	ug/kg	140	16.	1
Naphthalene	120	J	ug/kg	570	93.	1
Acrylonitrile	ND		ug/kg	570	160	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
Client ID: RB19_20-22
Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	38	J	ug/kg	140	24.	1
1,2,3-Trichlorobenzene	ND		ug/kg	280	46.	1
1,2,4-Trichlorobenzene	ND		ug/kg	280	39.	1
1,3,5-Trimethylbenzene	58	J	ug/kg	280	28.	1
1,2,4-Trimethylbenzene	340		ug/kg	280	48.	1
1,4-Dioxane	ND		ug/kg	14000	5000	1
p-Diethylbenzene	120	J	ug/kg	280	25.	1
p-Ethyltoluene	230	J	ug/kg	280	55.	1
1,2,4,5-Tetramethylbenzene	950		ug/kg	280	27.	1
Ethyl ether	ND		ug/kg	280	49.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	710	200	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/07/19 18:22
 Analyst: AD
 Percent Solids: 66%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.8	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.36	1
Tetrachloroethene	ND		ug/kg	0.68	0.27	1
Chlorobenzene	ND		ug/kg	0.68	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.94	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.68	0.23	1
Bromodichloromethane	ND		ug/kg	0.68	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.68	0.21	1
1,3-Dichloropropene, Total	ND		ug/kg	0.68	0.21	1
1,1-Dichloropropene	ND		ug/kg	0.68	0.22	1
Bromoform	ND		ug/kg	5.4	0.33	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.68	0.22	1
Benzene	ND		ug/kg	0.68	0.22	1
Toluene	ND		ug/kg	1.4	0.74	1
Ethylbenzene	ND		ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.4	1.3	1
Bromomethane	ND		ug/kg	2.7	0.79	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.7	0.61	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.19	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.68	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.76	1
o-Xylene	ND		ug/kg	1.4	0.40	1
Xylenes, Total	ND		ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	0.19	1
Dibromomethane	ND		ug/kg	2.7	0.32	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	44		ug/kg	14	6.5	1
Carbon disulfide	ND		ug/kg	14	6.2	1
2-Butanone	7.4	J	ug/kg	14	3.0	1
Vinyl acetate	ND		ug/kg	14	2.9	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.7	0.17	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
2,2-Dichloropropane	ND		ug/kg	2.7	0.27	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
1,3-Dichloropropane	ND		ug/kg	2.7	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.68	0.18	1
Bromobenzene	ND		ug/kg	2.7	0.20	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.7	0.16	1
o-Chlorotoluene	ND		ug/kg	2.7	0.26	1
p-Chlorotoluene	ND		ug/kg	2.7	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Hexachlorobutadiene	ND		ug/kg	5.4	0.23	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.4	0.88	1
Acrylonitrile	ND		ug/kg	5.4	1.6	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
Client ID: RB19_24-25
Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.4	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.37	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.45	1
1,4-Dioxane	ND		ug/kg	140	48.	1
p-Diethylbenzene	ND		ug/kg	2.7	0.24	1
p-Ethyltoluene	ND		ug/kg	2.7	0.52	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.7	0.26	1
Ethyl ether	ND		ug/kg	2.7	0.46	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.8	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	105		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-09
 Client ID: SOTB05_010319
 Sample Location: BRONX, NY

Date Collected: 01/03/19 00:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/06/19 15:35
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-09
 Client ID: SOTB05_010319
 Sample Location: BRONX, NY

Date Collected: 01/03/19 00:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-09
 Client ID: SOTB05_010319
 Sample Location: BRONX, NY

Date Collected: 01/03/19 00:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/06/19 12:10
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1195197-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/19 12:10
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1195197-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/06/19 12:10
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG1195197-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/07/19 14:04
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-06,08 Batch: WG1195498-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.96	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/07/19 14:04
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-06,08 Batch: WG1195498-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/07/19 14:04
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-06,08 Batch: WG1195498-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	100		70-130



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/08/19 10:15
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1195747-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	33	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/08/19 10:15
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1195747-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/08/19 10:15
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07 Batch: WG1195747-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1195197-3 WG1195197-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	110		120		70-130	9		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	120		120		70-130	0		20
Dibromochloromethane	110		110		63-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	120		120		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	110		110		70-130	0		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	100		99		54-136	1		20
1,1,1,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	94		95		64-130	1		20
Bromomethane	48		54		39-139	12		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1195197-3 WG1195197-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	100		110		55-138	10		20
1,1-Dichloroethene	110		100		61-145	10		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	110		110		70-130	0		20
1,2,3-Trichloropropane	110		110		64-130	0		20
Acrylonitrile	100		100		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	92		92		36-147	0		20
Acetone	140		120		58-148	15		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	89		82		63-138	8		20
Vinyl acetate	120		120		70-130	0		20
4-Methyl-2-pentanone	97		98		59-130	1		20
2-Hexanone	110		100		57-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1195197-3 WG1195197-4								
Bromochloromethane	120		120		70-130	0		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	110		110		70-130	0		20
1,3-Dichloropropane	110		100		70-130	10		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		99		70-130	1		20
n-Butylbenzene	110		100		53-136	10		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	97		96		70-130	1		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	96		94		41-144	2		20
Hexachlorobutadiene	100		100		63-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	97		97		70-130	0		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	97		98		70-130	1		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
1,4-Dioxane	144		128		56-162	12		20
p-Diethylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1195197-3 WG1195197-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	110		110		59-134	0		20
trans-1,4-Dichloro-2-butene	99		94		70-130	5		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	108		106		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	105		104		70-130
Dibromofluoromethane	104		103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1195498-3 WG1195498-4								
Methylene chloride	91		90		70-130	1		30
1,1-Dichloroethane	106		104		70-130	2		30
Chloroform	91		88		70-130	3		30
Carbon tetrachloride	100		101		70-130	1		30
1,2-Dichloropropane	102		104		70-130	2		30
Dibromochloromethane	99		99		70-130	0		30
1,1,2-Trichloroethane	88		86		70-130	2		30
Tetrachloroethene	94		94		70-130	0		30
Chlorobenzene	90		89		70-130	1		30
Trichlorofluoromethane	93		102		70-139	9		30
1,2-Dichloroethane	100		100		70-130	0		30
1,1,1-Trichloroethane	100		100		70-130	0		30
Bromodichloromethane	94		92		70-130	2		30
trans-1,3-Dichloropropene	91		90		70-130	1		30
cis-1,3-Dichloropropene	90		90		70-130	0		30
1,1-Dichloropropene	90		91		70-130	1		30
Bromoform	90		91		70-130	1		30
1,1,2,2-Tetrachloroethane	83		82		70-130	1		30
Benzene	88		87		70-130	1		30
Toluene	89		88		70-130	1		30
Ethylbenzene	88		87		70-130	1		30
Chloromethane	149	Q	149	Q	52-130	0		30
Bromomethane	162	Q	164	Q	57-147	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1195498-3 WG1195498-4								
Vinyl chloride	138	Q	138	Q	67-130	0		30
Chloroethane	119		130		50-151	9		30
1,1-Dichloroethene	110		98		65-135	12		30
trans-1,2-Dichloroethene	95		98		70-130	3		30
Trichloroethene	94		94		70-130	0		30
1,2-Dichlorobenzene	86		87		70-130	1		30
1,3-Dichlorobenzene	86		85		70-130	1		30
1,4-Dichlorobenzene	85		85		70-130	0		30
Methyl tert butyl ether	89		90		66-130	1		30
p/m-Xylene	87		87		70-130	0		30
o-Xylene	88		87		70-130	1		30
cis-1,2-Dichloroethene	93		95		70-130	2		30
Dibromomethane	90		90		70-130	0		30
Styrene	86		88		70-130	2		30
Dichlorodifluoromethane	145		143		30-146	1		30
Acetone	98		95		54-140	3		30
Carbon disulfide	104		84		59-130	21		30
2-Butanone	91		92		70-130	1		30
Vinyl acetate	116		114		70-130	2		30
4-Methyl-2-pentanone	99		100		70-130	1		30
1,2,3-Trichloropropane	80		78		68-130	3		30
2-Hexanone	89		84		70-130	6		30
Bromochloromethane	103		103		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1195498-3 WG1195498-4								
2,2-Dichloropropane	92		92		70-130	0		30
1,2-Dibromoethane	90		91		70-130	1		30
1,3-Dichloropropane	88		88		69-130	0		30
1,1,1,2-Tetrachloroethane	100		100		70-130	0		30
Bromobenzene	86		85		70-130	1		30
n-Butylbenzene	83		84		70-130	1		30
sec-Butylbenzene	81		80		70-130	1		30
tert-Butylbenzene	86		86		70-130	0		30
o-Chlorotoluene	81		79		70-130	3		30
p-Chlorotoluene	82		81		70-130	1		30
1,2-Dibromo-3-chloropropane	84		85		68-130	1		30
Hexachlorobutadiene	82		84		67-130	2		30
Isopropylbenzene	80		79		70-130	1		30
p-Isopropyltoluene	86		87		70-130	1		30
Naphthalene	82		82		70-130	0		30
Acrylonitrile	114		115		70-130	1		30
n-Propylbenzene	81		80		70-130	1		30
1,2,3-Trichlorobenzene	81		81		70-130	0		30
1,2,4-Trichlorobenzene	82		81		70-130	1		30
1,3,5-Trimethylbenzene	80		79		70-130	1		30
1,2,4-Trimethylbenzene	82		81		70-130	1		30
1,4-Dioxane	78		79		65-136	1		30
p-Diethylbenzene	85		85		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 Batch: WG1195498-3 WG1195498-4								
p-Ethyltoluene	79		79		70-130	0		30
1,2,4,5-Tetramethylbenzene	80		80		70-130	0		30
Ethyl ether	94		83		67-130	12		30
trans-1,4-Dichloro-2-butene	101		95		70-130	6		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	103		104		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	98		100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1195747-3 WG1195747-4								
Methylene chloride	94		94		70-130	0		30
1,1-Dichloroethane	100		100		70-130	0		30
Chloroform	98		101		70-130	3		30
Carbon tetrachloride	103		102		70-130	1		30
1,2-Dichloropropane	98		99		70-130	1		30
Dibromochloromethane	100		102		70-130	2		30
1,1,2-Trichloroethane	99		100		70-130	1		30
Tetrachloroethene	106		104		70-130	2		30
Chlorobenzene	102		103		70-130	1		30
Trichlorofluoromethane	99		99		70-139	0		30
1,2-Dichloroethane	96		98		70-130	2		30
1,1,1-Trichloroethane	102		103		70-130	1		30
Bromodichloromethane	99		101		70-130	2		30
trans-1,3-Dichloropropene	102		104		70-130	2		30
cis-1,3-Dichloropropene	100		101		70-130	1		30
1,1-Dichloropropene	104		104		70-130	0		30
Bromoform	100		103		70-130	3		30
1,1,2,2-Tetrachloroethane	96		100		70-130	4		30
Benzene	99		101		70-130	2		30
Toluene	104		104		70-130	0		30
Ethylbenzene	106		106		70-130	0		30
Chloromethane	100		98		52-130	2		30
Bromomethane	92		91		57-147	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1195747-3 WG1195747-4								
Vinyl chloride	99		97		67-130	2		30
Chloroethane	97		96		50-151	1		30
1,1-Dichloroethene	102		102		65-135	0		30
trans-1,2-Dichloroethene	101		101		70-130	0		30
Trichloroethene	101		100		70-130	1		30
1,2-Dichlorobenzene	102		104		70-130	2		30
1,3-Dichlorobenzene	105		106		70-130	1		30
1,4-Dichlorobenzene	104		104		70-130	0		30
Methyl tert butyl ether	96		98		66-130	2		30
p/m-Xylene	106		107		70-130	1		30
o-Xylene	105		106		70-130	1		30
cis-1,2-Dichloroethene	100		100		70-130	0		30
Dibromomethane	94		98		70-130	4		30
Styrene	106		108		70-130	2		30
Dichlorodifluoromethane	99		99		30-146	0		30
Acetone	94		98		54-140	4		30
Carbon disulfide	96		95		59-130	1		30
2-Butanone	92		96		70-130	4		30
Vinyl acetate	95		97		70-130	2		30
4-Methyl-2-pentanone	90		92		70-130	2		30
1,2,3-Trichloropropane	98		100		68-130	2		30
2-Hexanone	90		94		70-130	4		30
Bromochloromethane	100		100		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1195747-3 WG1195747-4								
2,2-Dichloropropane	104		104		70-130	0		30
1,2-Dibromoethane	98		101		70-130	3		30
1,3-Dichloropropane	99		101		69-130	2		30
1,1,1,2-Tetrachloroethane	103		105		70-130	2		30
Bromobenzene	102		105		70-130	3		30
n-Butylbenzene	109		111		70-130	2		30
sec-Butylbenzene	110		111		70-130	1		30
tert-Butylbenzene	108		110		70-130	2		30
o-Chlorotoluene	108		111		70-130	3		30
p-Chlorotoluene	107		108		70-130	1		30
1,2-Dibromo-3-chloropropane	90		96		68-130	6		30
Hexachlorobutadiene	108		109		67-130	1		30
Isopropylbenzene	108		109		70-130	1		30
p-Isopropyltoluene	110		111		70-130	1		30
Naphthalene	97		102		70-130	5		30
Acrylonitrile	92		98		70-130	6		30
n-Propylbenzene	108		110		70-130	2		30
1,2,3-Trichlorobenzene	100		103		70-130	3		30
1,2,4-Trichlorobenzene	102		105		70-130	3		30
1,3,5-Trimethylbenzene	108		109		70-130	1		30
1,2,4-Trimethylbenzene	108		108		70-130	0		30
1,4-Dioxane	94		100		65-136	6		30
p-Diethylbenzene	108		108		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07 Batch: WG1195747-3 WG1195747-4								
p-Ethyltoluene	108		109		70-130	1		30
1,2,4,5-Tetramethylbenzene	108		108		70-130	0		30
Ethyl ether	97		98		67-130	1		30
trans-1,4-Dichloro-2-butene	98		100		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	93		92		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	94		94		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1195498-6 WG1195498-7 QC Sample: L1900324-02 Client ID: RB21_2-4												
Methylene chloride	ND	107	98	91		110	104		70-130	14		30
1,1-Dichloroethane	ND	107	120	114		130	122		70-130	8		30
Chloroform	ND	107	98	92		110	101		70-130	11		30
Carbon tetrachloride	ND	107	120	115		140	128		70-130	12		30
1,2-Dichloropropane	ND	107	110	103		120	115		70-130	12		30
Dibromochloromethane	ND	107	93	86		110	102		70-130	17		30
1,1,2-Trichloroethane	ND	107	84	78		96	88		70-130	13		30
Tetrachloroethene	ND	107	86	81		110	105		70-130	28		30
Chlorobenzene	ND	107	70	66	Q	96	89		70-130	31	Q	30
Trichlorofluoromethane	ND	107	140	130		140	132		70-139	3		30
1,2-Dichloroethane	ND	107	100	93		110	105		70-130	13		30
1,1,1-Trichloroethane	ND	107	120	115		130	124		70-130	9		30
Bromodichloromethane	ND	107	95	89		110	101		70-130	14		30
trans-1,3-Dichloropropene	ND	107	76	71		97	90		70-130	24		30
cis-1,3-Dichloropropene	ND	107	86	80		110	98		70-130	21		30
1,1-Dichloropropene	ND	107	110	100		120	115		70-130	15		30
Bromoform	ND	107	82	77		100	96		70-130	23		30
1,1,2,2-Tetrachloroethane	ND	107	71	67	Q	83	77		70-130	16		30
Benzene	ND	107	96	90		110	101		70-130	12		30
Toluene	ND	107	84	78		110	97		70-130	23		30
Ethylbenzene	ND	107	73	68	Q	100	96		70-130	35	Q	30
Chloromethane	ND	107	180	166	Q	190	176	Q	52-130	7		30
Bromomethane	ND	107	150	137		170	161	Q	57-147	17		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1195498-6 WG1195498-7 QC Sample: L1900324-02 Client ID: RB21_2-4												
Vinyl chloride	ND	107	180	168	Q	190	176	Q	67-130	5		30
Chloroethane	ND	107	190	179	Q	200	180	Q	50-151	2		30
1,1-Dichloroethene	ND	107	61	57	Q	63	58	Q	65-135	2		30
trans-1,2-Dichloroethene	ND	107	100	97		120	111		70-130	14		30
Trichloroethene	ND	107	100	93		120	111		70-130	18		30
1,2-Dichlorobenzene	ND	107	50	46	Q	77	71		70-130	43	Q	30
1,3-Dichlorobenzene	ND	107	46	43	Q	78	72		70-130	51	Q	30
1,4-Dichlorobenzene	ND	107	43	40	Q	74	68	Q	70-130	53	Q	30
Methyl tert butyl ether	ND	107	100	93		110	98		66-130	6		30
p/m-Xylene	ND	214	140	65	Q	200	93		70-130	37	Q	30
o-Xylene	ND	214	150	68	Q	200	93		70-130	32	Q	30
cis-1,2-Dichloroethene	ND	107	96	89		110	104		70-130	16		30
Dibromomethane	ND	107	82	76		99	91		70-130	19		30
Styrene	ND	214	130	61	Q	190	87		70-130	36	Q	30
Dichlorodifluoromethane	ND	107	190	179	Q	200	186	Q	30-146	5		30
Acetone	ND	107	120	107		110	98		54-140	8		30
Carbon disulfide	ND	107	79	73		59	54	Q	59-130	29		30
2-Butanone	ND	107	110	99		110	105		70-130	7		30
Vinyl acetate	ND	107	50	46	Q	44	40	Q	70-130	13		30
4-Methyl-2-pentanone	ND	107	110	104		120	112		70-130	9		30
1,2,3-Trichloropropane	ND	107	71	66	Q	85	78		68-130	18		30
2-Hexanone	ND	107	96	89		110	97		70-130	9		30
Bromochloromethane	ND	107	95	88		110	101		70-130	14		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1195498-6 WG1195498-7 QC Sample: L1900324-02 Client ID: RB21_2-4												
2,2-Dichloropropane	ND	107	120	110		130	117		70-130	7		30
1,2-Dibromoethane	ND	107	80	74		96	88		70-130	18		30
1,3-Dichloropropane	ND	107	80	74		93	86		69-130	15		30
1,1,1,2-Tetrachloroethane	ND	107	93	87		110	104		70-130	18		30
Bromobenzene	ND	107	58	54	Q	84	78		70-130	37	Q	30
n-Butylbenzene	ND	107	35	33	Q	73	68	Q	70-130	70	Q	30
sec-Butylbenzene	ND	107	49	45	Q	84	78		70-130	54	Q	30
tert-Butylbenzene	ND	107	60	56	Q	96	89		70-130	46	Q	30
o-Chlorotoluene	ND	107	54	50	Q	87	80		70-130	47	Q	30
p-Chlorotoluene	ND	107	48	44	Q	82	76		70-130	54	Q	30
1,2-Dibromo-3-chloropropane	ND	107	75	70		90	83		68-130	17		30
Hexachlorobutadiene	ND	107	24	22	Q	44	40	Q	67-130	58	Q	30
Isopropylbenzene	ND	107	61	57	Q	96	88		70-130	44	Q	30
p-Isopropyltoluene	ND	107	46	43	Q	87	80		70-130	62	Q	30
Naphthalene	ND	107	48	45	Q	64	59	Q	70-130	28		30
Acrylonitrile	ND	107	110	99		120	114		70-130	15		30
n-Propylbenzene	ND	107	52	48	Q	91	84		70-130	56	Q	30
1,2,3-Trichlorobenzene	ND	107	35	33	Q	52	48	Q	70-130	38	Q	30
1,2,4-Trichlorobenzene	ND	107	32	30	Q	53	49	Q	70-130	49	Q	30
1,3,5-Trimethylbenzene	ND	107	53	49	Q	87	80		70-130	49	Q	30
1,2,4-Trimethylbenzene	ND	107	49	46	Q	85	78		70-130	53	Q	30
1,4-Dioxane	ND	5350	5400	101		5700	106		65-136	5		30
p-Diethylbenzene	ND	107	39	36	Q	79	73		70-130	68	Q	30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-06,08 QC Batch ID: WG1195498-6 WG1195498-7 QC Sample: L1900324-02 Client ID: RB21_2-4												
p-Ethyltoluene	ND	107	48	44	Q	86	79		70-130	57	Q	30
1,2,4,5-Tetramethylbenzene	ND	107	40	38	Q	71	66	Q	70-130	55	Q	30
Ethyl ether	ND	107	100	97		110	97		67-130	1		30
trans-1,4-Dichloro-2-butene	ND	107	80	75		110	97		70-130	27		30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		107		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	101		102		70-130
Toluene-d8	100		99		70-130



SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01 D
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 10:47
 Analyst: ALS
 Percent Solids: 92%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	660		ug/kg	280	37.	2
1,2,4-Trichlorobenzene	ND		ug/kg	360	41.	2
Hexachlorobenzene	ND		ug/kg	210	40.	2
Bis(2-chloroethyl)ether	ND		ug/kg	320	48.	2
2-Chloronaphthalene	ND		ug/kg	360	35.	2
1,2-Dichlorobenzene	ND		ug/kg	360	64.	2
1,3-Dichlorobenzene	ND		ug/kg	360	61.	2
1,4-Dichlorobenzene	ND		ug/kg	360	62.	2
3,3'-Dichlorobenzidine	ND		ug/kg	360	95.	2
2,4-Dinitrotoluene	ND		ug/kg	360	71.	2
2,6-Dinitrotoluene	ND		ug/kg	360	61.	2
Fluoranthene	12000		ug/kg	210	41.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	360	38.	2
4-Bromophenyl phenyl ether	ND		ug/kg	360	54.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	430	61.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	390	36.	2
Hexachlorobutadiene	ND		ug/kg	360	52.	2
Hexachlorocyclopentadiene	ND		ug/kg	1000	320	2
Hexachloroethane	ND		ug/kg	280	58.	2
Isophorone	ND		ug/kg	320	46.	2
Naphthalene	410		ug/kg	360	44.	2
Nitrobenzene	ND		ug/kg	320	53.	2
NDPA/DPA	ND		ug/kg	280	41.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	360	55.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	360	120	2
Butyl benzyl phthalate	ND		ug/kg	360	90.	2
Di-n-butylphthalate	ND		ug/kg	360	68.	2
Di-n-octylphthalate	ND		ug/kg	360	120	2

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-01 D

Date Collected: 01/03/19 11:30

Client ID: RB21_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	360	33.	2
Dimethyl phthalate	ND		ug/kg	360	75.	2
Benzo(a)anthracene	5900		ug/kg	210	40.	2
Benzo(a)pyrene	5100		ug/kg	280	87.	2
Benzo(b)fluoranthene	6300		ug/kg	210	60.	2
Benzo(k)fluoranthene	2300		ug/kg	210	57.	2
Chrysene	6000		ug/kg	210	37.	2
Acenaphthylene	220	J	ug/kg	280	55.	2
Anthracene	1700		ug/kg	210	70.	2
Benzo(ghi)perylene	3200		ug/kg	280	42.	2
Fluorene	670		ug/kg	360	35.	2
Phenanthrene	9900		ug/kg	210	43.	2
Dibenzo(a,h)anthracene	820		ug/kg	210	41.	2
Indeno(1,2,3-cd)pyrene	3500		ug/kg	280	50.	2
Pyrene	11000		ug/kg	210	36.	2
Biphenyl	ND		ug/kg	810	83.	2
4-Chloroaniline	ND		ug/kg	360	65.	2
2-Nitroaniline	ND		ug/kg	360	69.	2
3-Nitroaniline	ND		ug/kg	360	67.	2
4-Nitroaniline	ND		ug/kg	360	150	2
Dibenzofuran	520		ug/kg	360	34.	2
2-Methylnaphthalene	230	J	ug/kg	430	43.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	360	37.	2
Acetophenone	ND		ug/kg	360	44.	2
2,4,6-Trichlorophenol	ND		ug/kg	210	68.	2
p-Chloro-m-cresol	ND		ug/kg	360	53.	2
2-Chlorophenol	ND		ug/kg	360	42.	2
2,4-Dichlorophenol	ND		ug/kg	320	57.	2
2,4-Dimethylphenol	ND		ug/kg	360	120	2
2-Nitrophenol	ND		ug/kg	770	130	2
4-Nitrophenol	ND		ug/kg	500	140	2
2,4-Dinitrophenol	ND		ug/kg	1700	170	2
4,6-Dinitro-o-cresol	ND		ug/kg	930	170	2
Pentachlorophenol	ND		ug/kg	280	79.	2
Phenol	ND		ug/kg	360	54.	2
2-Methylphenol	ND		ug/kg	360	55.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	510	56.	2

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01 D
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	360	68.	2
Benzoic Acid	ND		ug/kg	1200	360	2
Benzyl Alcohol	ND		ug/kg	360	110	2
Carbazole	850		ug/kg	360	35.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	87		30-120
2,4,6-Tribromophenol	12		10-136
4-Terphenyl-d14	88		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/05/19 17:12
 Analyst: ALS
 Percent Solids: 95%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	280		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	150	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	23	J	ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	120		ug/kg	100	19.	1
Benzo(a)pyrene	120	J	ug/kg	140	42.	1
Benzo(b)fluoranthene	180		ug/kg	100	29.	1
Benzo(k)fluoranthene	46	J	ug/kg	100	27.	1
Chrysene	140		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	80	J	ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	130		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	85	J	ug/kg	140	24.	1
Pyrene	290		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	71.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	820	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	82.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	27.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	ND		ug/kg	170	16.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	65		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	71		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 11:38
 Analyst: ALS
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	28	J	ug/kg	130	17.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	30.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	29.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	440		ug/kg	100	19.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	150	1
Hexachloroethane	ND		ug/kg	130	27.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	23	J	ug/kg	170	20.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	130	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	58.	1
Butyl benzyl phthalate	ND		ug/kg	170	42.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	57.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	35.	1
Benzo(a)anthracene	230		ug/kg	100	19.	1
Benzo(a)pyrene	190		ug/kg	130	41.	1
Benzo(b)fluoranthene	240		ug/kg	100	28.	1
Benzo(k)fluoranthene	85	J	ug/kg	100	27.	1
Chrysene	220		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	130	26.	1
Anthracene	59	J	ug/kg	100	33.	1
Benzo(ghi)perylene	120	J	ug/kg	130	20.	1
Fluorene	26	J	ug/kg	170	16.	1
Phenanthrene	370		ug/kg	100	20.	1
Dibenzo(a,h)anthracene	36	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	140		ug/kg	130	24.	1
Pyrene	420		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	380	39.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	32.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	21	J	ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	360	63.	1
4-Nitrophenol	ND		ug/kg	240	69.	1
2,4-Dinitrophenol	ND		ug/kg	810	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	81.	1
Pentachlorophenol	ND		ug/kg	130	37.	1
Phenol	ND		ug/kg	170	25.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	32.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	32	J	ug/kg	170	16.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	53		10-136
4-Terphenyl-d14	69		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/06/19 01:43
 Analyst: SZ
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	89	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	2400		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	63	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-04

Date Collected: 01/03/19 13:00

Client ID: RB22_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	1100		ug/kg	110	20.	1
Benzo(a)pyrene	1100		ug/kg	140	44.	1
Benzo(b)fluoranthene	1400		ug/kg	110	30.	1
Benzo(k)fluoranthene	520		ug/kg	110	29.	1
Chrysene	1100		ug/kg	110	19.	1
Acenaphthylene	160		ug/kg	140	28.	1
Anthracene	260		ug/kg	110	35.	1
Benzo(ghi)perylene	710		ug/kg	140	21.	1
Fluorene	79	J	ug/kg	180	18.	1
Phenanthrene	1400		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	170		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	750		ug/kg	140	25.	1
Pyrene	2000		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	63	J	ug/kg	180	17.	1
2-Methylnaphthalene	30	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
Client ID: RB22_0-2
Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	120	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		25-120
Phenol-d6	57		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	48		10-136
4-Terphenyl-d14	53		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/05/19 23:35
 Analyst: SZ
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	180		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	62	J	ug/kg	110	20.	1
Benzo(a)pyrene	48	J	ug/kg	140	44.	1
Benzo(b)fluoranthene	85	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	67	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	32	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	100	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	29	J	ug/kg	140	25.	1
Pyrene	160		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		25-120
Phenol-d6	47		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	56		30-120
2,4,6-Tribromophenol	22		10-136
4-Terphenyl-d14	40		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/06/19 02:09
 Analyst: SZ
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	91	J	ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	1800		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	130	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	1200		ug/kg	110	21.	1
Benzo(a)pyrene	1300		ug/kg	150	45.	1
Benzo(b)fluoranthene	1700		ug/kg	110	31.	1
Benzo(k)fluoranthene	600		ug/kg	110	29.	1
Chrysene	1200		ug/kg	110	19.	1
Acenaphthylene	710		ug/kg	150	28.	1
Anthracene	360		ug/kg	110	36.	1
Benzo(ghi)perylene	1200		ug/kg	150	22.	1
Fluorene	82	J	ug/kg	180	18.	1
Phenanthrene	960		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	250		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	1200		ug/kg	150	26.	1
Pyrene	1500		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	72	J	ug/kg	180	17.	1
2-Methylnaphthalene	67	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	120	J	ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	59		10-136
4-Terphenyl-d14	50		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/05/19 23:09
 Analyst: SZ
 Percent Solids: 57%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	660	86.	1
1,2,4-Trichlorobenzene	ND		ug/kg	830	95.	1
Hexachlorobenzene	ND		ug/kg	500	93.	1
Bis(2-chloroethyl)ether	ND		ug/kg	750	110	1
2-Chloronaphthalene	ND		ug/kg	830	82.	1
1,2-Dichlorobenzene	ND		ug/kg	830	150	1
1,3-Dichlorobenzene	ND		ug/kg	830	140	1
1,4-Dichlorobenzene	ND		ug/kg	830	140	1
3,3'-Dichlorobenzidine	ND		ug/kg	830	220	1
2,4-Dinitrotoluene	ND		ug/kg	830	160	1
2,6-Dinitrotoluene	ND		ug/kg	830	140	1
Fluoranthene	440	J	ug/kg	500	95.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	830	89.	1
4-Bromophenyl phenyl ether	ND		ug/kg	830	130	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	1000	140	1
Bis(2-chloroethoxy)methane	ND		ug/kg	900	83.	1
Hexachlorobutadiene	ND		ug/kg	830	120	1
Hexachlorocyclopentadiene	ND		ug/kg	2400	750	1
Hexachloroethane	ND		ug/kg	660	130	1
Isophorone	ND		ug/kg	750	110	1
Naphthalene	300	J	ug/kg	830	100	1
Nitrobenzene	ND		ug/kg	750	120	1
NDPA/DPA	ND		ug/kg	660	94.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	830	130	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	830	290	1
Butyl benzyl phthalate	ND		ug/kg	830	210	1
Di-n-butylphthalate	ND		ug/kg	830	160	1
Di-n-octylphthalate	ND		ug/kg	830	280	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-07

Date Collected: 01/03/19 14:05

Client ID: RB19_20-22

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	830	77.	1
Dimethyl phthalate	ND		ug/kg	830	170	1
Benzo(a)anthracene	200	J	ug/kg	500	93.	1
Benzo(a)pyrene	250	J	ug/kg	660	200	1
Benzo(b)fluoranthene	230	J	ug/kg	500	140	1
Benzo(k)fluoranthene	ND		ug/kg	500	130	1
Chrysene	190	J	ug/kg	500	86.	1
Acenaphthylene	ND		ug/kg	660	130	1
Anthracene	ND		ug/kg	500	160	1
Benzo(ghi)perylene	180	J	ug/kg	660	98.	1
Fluorene	ND		ug/kg	830	81.	1
Phenanthrene	170	J	ug/kg	500	100	1
Dibenzo(a,h)anthracene	ND		ug/kg	500	96.	1
Indeno(1,2,3-cd)pyrene	140	J	ug/kg	660	120	1
Pyrene	570		ug/kg	500	82.	1
Biphenyl	ND		ug/kg	1900	190	1
4-Chloroaniline	ND		ug/kg	830	150	1
2-Nitroaniline	ND		ug/kg	830	160	1
3-Nitroaniline	ND		ug/kg	830	160	1
4-Nitroaniline	ND		ug/kg	830	340	1
Dibenzofuran	ND		ug/kg	830	78.	1
2-Methylnaphthalene	ND		ug/kg	1000	100	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	830	87.	1
Acetophenone	ND		ug/kg	830	100	1
2,4,6-Trichlorophenol	ND		ug/kg	500	160	1
p-Chloro-m-cresol	ND		ug/kg	830	120	1
2-Chlorophenol	ND		ug/kg	830	98.	1
2,4-Dichlorophenol	ND		ug/kg	750	130	1
2,4-Dimethylphenol	ND		ug/kg	830	270	1
2-Nitrophenol	ND		ug/kg	1800	310	1
4-Nitrophenol	ND		ug/kg	1200	340	1
2,4-Dinitrophenol	ND		ug/kg	4000	390	1
4,6-Dinitro-o-cresol	ND		ug/kg	2200	400	1
Pentachlorophenol	ND		ug/kg	660	180	1
Phenol	ND		ug/kg	830	120	1
2-Methylphenol	ND		ug/kg	830	130	1
3-Methylphenol/4-Methylphenol	370	J	ug/kg	1200	130	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	830	160	1
Benzoic Acid	ND		ug/kg	2700	840	1
Benzyl Alcohol	ND		ug/kg	830	250	1
Carbazole	ND		ug/kg	830	81.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	51		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/06/19 00:26
 Analyst: SZ
 Percent Solids: 66%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	33	J	ug/kg	200	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	240	28.	1
Hexachlorobenzene	ND		ug/kg	150	28.	1
Bis(2-chloroethyl)ether	ND		ug/kg	220	33.	1
2-Chloronaphthalene	ND		ug/kg	240	24.	1
1,2-Dichlorobenzene	ND		ug/kg	240	44.	1
1,3-Dichlorobenzene	ND		ug/kg	240	42.	1
1,4-Dichlorobenzene	ND		ug/kg	240	43.	1
3,3'-Dichlorobenzidine	ND		ug/kg	240	65.	1
2,4-Dinitrotoluene	ND		ug/kg	240	49.	1
2,6-Dinitrotoluene	ND		ug/kg	240	42.	1
Fluoranthene	480		ug/kg	150	28.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	240	26.	1
4-Bromophenyl phenyl ether	ND		ug/kg	240	38.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	300	42.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	260	25.	1
Hexachlorobutadiene	ND		ug/kg	240	36.	1
Hexachlorocyclopentadiene	ND		ug/kg	700	220	1
Hexachloroethane	ND		ug/kg	200	40.	1
Isophorone	ND		ug/kg	220	32.	1
Naphthalene	240		ug/kg	240	30.	1
Nitrobenzene	ND		ug/kg	220	36.	1
NDPA/DPA	ND		ug/kg	200	28.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	240	38.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	240	85.	1
Butyl benzyl phthalate	ND		ug/kg	240	62.	1
Di-n-butylphthalate	ND		ug/kg	240	47.	1
Di-n-octylphthalate	ND		ug/kg	240	84.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	240	23.	1
Dimethyl phthalate	ND		ug/kg	240	52.	1
Benzo(a)anthracene	380		ug/kg	150	28.	1
Benzo(a)pyrene	580		ug/kg	200	60.	1
Benzo(b)fluoranthene	580		ug/kg	150	41.	1
Benzo(k)fluoranthene	180		ug/kg	150	39.	1
Chrysene	370		ug/kg	150	26.	1
Acenaphthylene	61	J	ug/kg	200	38.	1
Anthracene	130	J	ug/kg	150	48.	1
Benzo(ghi)perylene	370		ug/kg	200	29.	1
Fluorene	58	J	ug/kg	240	24.	1
Phenanthrene	270		ug/kg	150	30.	1
Dibenzo(a,h)anthracene	60	J	ug/kg	150	28.	1
Indeno(1,2,3-cd)pyrene	340		ug/kg	200	34.	1
Pyrene	540		ug/kg	150	24.	1
Biphenyl	ND		ug/kg	560	57.	1
4-Chloroaniline	ND		ug/kg	240	45.	1
2-Nitroaniline	ND		ug/kg	240	47.	1
3-Nitroaniline	ND		ug/kg	240	46.	1
4-Nitroaniline	ND		ug/kg	240	100	1
Dibenzofuran	33	J	ug/kg	240	23.	1
2-Methylnaphthalene	50	J	ug/kg	300	30.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	26.	1
Acetophenone	ND		ug/kg	240	30.	1
2,4,6-Trichlorophenol	ND		ug/kg	150	47.	1
p-Chloro-m-cresol	ND		ug/kg	240	37.	1
2-Chlorophenol	ND		ug/kg	240	29.	1
2,4-Dichlorophenol	ND		ug/kg	220	40.	1
2,4-Dimethylphenol	ND		ug/kg	240	81.	1
2-Nitrophenol	ND		ug/kg	530	92.	1
4-Nitrophenol	ND		ug/kg	340	100	1
2,4-Dinitrophenol	ND		ug/kg	1200	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	640	120	1
Pentachlorophenol	ND		ug/kg	200	54.	1
Phenol	ND		ug/kg	240	37.	1
2-Methylphenol	ND		ug/kg	240	38.	1
3-Methylphenol/4-Methylphenol	190	J	ug/kg	350	38.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	240	47.	1
Benzoic Acid	ND		ug/kg	800	250	1
Benzyl Alcohol	ND		ug/kg	240	75.	1
Carbazole	ND		ug/kg	240	24.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	67		10-136
4-Terphenyl-d14	49		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/05/19 11:26
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04-08 Batch: WG1194798-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/05/19 11:26
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04-08 Batch: WG1194798-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/05/19 11:26
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 10:42

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04-08 Batch: WG1194798-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	67		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/10/19 08:14
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1196085-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	140	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	18.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	170	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	140	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	140	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/10/19 08:14
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1196085-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	39.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	31.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	22.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	37.
4-Chloroaniline	ND		ug/kg	160	29.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	30.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	140	26.
2,4-Dimethylphenol	ND		ug/kg	160	53.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/10/19 08:14
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 01/09/19 13:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1196085-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	75.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	520	160
Benzyl Alcohol	ND		ug/kg	160	49.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	90		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 Batch: WG1194798-2 WG1194798-3								
Acenaphthene	64		66		31-137	3		50
1,2,4-Trichlorobenzene	78		73		38-107	7		50
Hexachlorobenzene	72		69		40-140	4		50
Bis(2-chloroethyl)ether	73		75		40-140	3		50
2-Chloronaphthalene	78		77		40-140	1		50
1,2-Dichlorobenzene	71		75		40-140	5		50
1,3-Dichlorobenzene	73		75		40-140	3		50
1,4-Dichlorobenzene	72		74		28-104	3		50
3,3'-Dichlorobenzidine	52		55		40-140	6		50
2,4-Dinitrotoluene	80		84		40-132	5		50
2,6-Dinitrotoluene	88		88		40-140	0		50
Fluoranthene	72		78		40-140	8		50
4-Chlorophenyl phenyl ether	71		64		40-140	10		50
4-Bromophenyl phenyl ether	70		70		40-140	0		50
Bis(2-chloroisopropyl)ether	67		65		40-140	3		50
Bis(2-chloroethoxy)methane	71		70		40-117	1		50
Hexachlorobutadiene	72		72		40-140	0		50
Hexachlorocyclopentadiene	76		77		40-140	1		50
Hexachloroethane	74		71		40-140	4		50
Isophorone	75		70		40-140	7		50
Naphthalene	71		75		40-140	5		50
Nitrobenzene	78		74		40-140	5		50
NDPA/DPA	71		75		36-157	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 Batch: WG1194798-2 WG1194798-3								
n-Nitrosodi-n-propylamine	71		70		32-121	1		50
Bis(2-ethylhexyl)phthalate	89		92		40-140	3		50
Butyl benzyl phthalate	86		87		40-140	1		50
Di-n-butylphthalate	86		76		40-140	12		50
Di-n-octylphthalate	81		83		40-140	2		50
Diethyl phthalate	77		68		40-140	12		50
Dimethyl phthalate	76		79		40-140	4		50
Benzo(a)anthracene	72		73		40-140	1		50
Benzo(a)pyrene	82		71		40-140	14		50
Benzo(b)fluoranthene	80		71		40-140	12		50
Benzo(k)fluoranthene	80		70		40-140	13		50
Chrysene	74		75		40-140	1		50
Acenaphthylene	76		80		40-140	5		50
Anthracene	77		79		40-140	3		50
Benzo(ghi)perylene	75		77		40-140	3		50
Fluorene	74		66		40-140	11		50
Phenanthrene	75		76		40-140	1		50
Dibenzo(a,h)anthracene	73		77		40-140	5		50
Indeno(1,2,3-cd)pyrene	75		68		40-140	10		50
Pyrene	71		76		35-142	7		50
Biphenyl	80		77		54-104	4		50
4-Chloroaniline	57		60		40-140	5		50
2-Nitroaniline	93		94		47-134	1		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 Batch: WG1194798-2 WG1194798-3								
3-Nitroaniline	55		57		26-129	4		50
4-Nitroaniline	76		65		41-125	16		50
Dibenzofuran	69		71		40-140	3		50
2-Methylnaphthalene	77		73		40-140	5		50
1,2,4,5-Tetrachlorobenzene	81		82		40-117	1		50
Acetophenone	77		75		14-144	3		50
2,4,6-Trichlorophenol	89		87		30-130	2		50
p-Chloro-m-cresol	84		83		26-103	1		50
2-Chlorophenol	84		84		25-102	0		50
2,4-Dichlorophenol	88		87		30-130	1		50
2,4-Dimethylphenol	87		81		30-130	7		50
2-Nitrophenol	97		93		30-130	4		50
4-Nitrophenol	74		78		11-114	5		50
2,4-Dinitrophenol	87		90		4-130	3		50
4,6-Dinitro-o-cresol	94		81		10-130	15		50
Pentachlorophenol	82		84		17-109	2		50
Phenol	75		76		26-90	1		50
2-Methylphenol	81		78		30-130.	4		50
3-Methylphenol/4-Methylphenol	86		85		30-130	1		50
2,4,5-Trichlorophenol	86		85		30-130	1		50
Benzoic Acid	60		72		10-110	18		50
Benzyl Alcohol	75		78		40-140	4		50
Carbazole	72		78		54-128	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 Batch: WG1194798-2 WG1194798-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	72		84		25-120
Phenol-d6	80		81		10-120
Nitrobenzene-d5	80		76		23-120
2-Fluorobiphenyl	75		74		30-120
2,4,6-Tribromophenol	77		79		10-136
4-Terphenyl-d14	66		65		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1196085-2 WG1196085-3								
Acenaphthene	86		81		31-137	6		50
1,2,4-Trichlorobenzene	82		76		38-107	8		50
Hexachlorobenzene	91		83		40-140	9		50
Bis(2-chloroethyl)ether	67		62		40-140	8		50
2-Chloronaphthalene	89		82		40-140	8		50
1,2-Dichlorobenzene	76		72		40-140	5		50
1,3-Dichlorobenzene	77		72		40-140	7		50
1,4-Dichlorobenzene	77		73		28-104	5		50
3,3'-Dichlorobenzidine	64		61		40-140	5		50
2,4-Dinitrotoluene	97		91		40-132	6		50
2,6-Dinitrotoluene	95		89		40-140	7		50
Fluoranthene	91		87		40-140	4		50
4-Chlorophenyl phenyl ether	90		84		40-140	7		50
4-Bromophenyl phenyl ether	91		84		40-140	8		50
Bis(2-chloroisopropyl)ether	76		69		40-140	10		50
Bis(2-chloroethoxy)methane	74		69		40-117	7		50
Hexachlorobutadiene	84		79		40-140	6		50
Hexachlorocyclopentadiene	83		75		40-140	10		50
Hexachloroethane	75		69		40-140	8		50
Isophorone	75		69		40-140	8		50
Naphthalene	80		75		40-140	6		50
Nitrobenzene	74		68		40-140	8		50
NDPA/DPA	91		86		36-157	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1196085-2 WG1196085-3								
n-Nitrosodi-n-propylamine	75		69		32-121	8		50
Bis(2-ethylhexyl)phthalate	96		90		40-140	6		50
Butyl benzyl phthalate	95		91		40-140	4		50
Di-n-butylphthalate	96		91		40-140	5		50
Di-n-octylphthalate	98		93		40-140	5		50
Diethyl phthalate	90		84		40-140	7		50
Dimethyl phthalate	90		85		40-140	6		50
Benzo(a)anthracene	89		84		40-140	6		50
Benzo(a)pyrene	92		87		40-140	6		50
Benzo(b)fluoranthene	91		84		40-140	8		50
Benzo(k)fluoranthene	86		84		40-140	2		50
Chrysene	85		81		40-140	5		50
Acenaphthylene	90		84		40-140	7		50
Anthracene	90		86		40-140	5		50
Benzo(ghi)perylene	87		82		40-140	6		50
Fluorene	88		82		40-140	7		50
Phenanthrene	86		83		40-140	4		50
Dibenzo(a,h)anthracene	88		83		40-140	6		50
Indeno(1,2,3-cd)pyrene	92		86		40-140	7		50
Pyrene	90		87		35-142	3		50
Biphenyl	91		86		54-104	6		50
4-Chloroaniline	45		52		40-140	14		50
2-Nitroaniline	101		93		47-134	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1196085-2 WG1196085-3								
3-Nitroaniline	65		64		26-129	2		50
4-Nitroaniline	90		85		41-125	6		50
Dibenzofuran	86		80		40-140	7		50
2-Methylnaphthalene	87		81		40-140	7		50
1,2,4,5-Tetrachlorobenzene	91		85		40-117	7		50
Acetophenone	80		74		14-144	8		50
2,4,6-Trichlorophenol	101		91		30-130	10		50
p-Chloro-m-cresol	90		84		26-103	7		50
2-Chlorophenol	87		81		25-102	7		50
2,4-Dichlorophenol	95		88		30-130	8		50
2,4-Dimethylphenol	86		82		30-130	5		50
2-Nitrophenol	94		86		30-130	9		50
4-Nitrophenol	93		92		11-114	1		50
2,4-Dinitrophenol	80		74		4-130	8		50
4,6-Dinitro-o-cresol	94		85		10-130	10		50
Pentachlorophenol	88		83		17-109	6		50
Phenol	77		73		26-90	5		50
2-Methylphenol	84		79		30-130.	6		50
3-Methylphenol/4-Methylphenol	83		83		30-130	0		50
2,4,5-Trichlorophenol	102		95		30-130	7		50
Benzoic Acid	53		50		10-110	6		50
Benzyl Alcohol	79		72		40-140	9		50
Carbazole	91		88		54-128	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1196085-2 WG1196085-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
2-Fluorophenol	82		78		25-120
Phenol-d6	84		78		10-120
Nitrobenzene-d5	77		72		23-120
2-Fluorobiphenyl	92		85		30-120
2,4,6-Tribromophenol	96		89		10-136
4-Terphenyl-d14	92		88		18-120

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 QC Batch ID: WG1194798-4 WG1194798-5 QC Sample: L1900324-02 Client ID: RB21_2-4												
Acenaphthene	ND	1370	840	61		850	62		31-137	1		50
1,2,4-Trichlorobenzene	ND	1370	850	62		940	69		38-107	10		50
Hexachlorobenzene	ND	1370	840	61		850	62		40-140	1		50
Bis(2-chloroethyl)ether	ND	1370	800	59		900	66		40-140	12		50
2-Chloronaphthalene	ND	1370	840	61		980	72		40-140	15		50
1,2-Dichlorobenzene	ND	1370	890	65		920	67		40-140	3		50
1,3-Dichlorobenzene	ND	1370	780	57		920	67		40-140	16		50
1,4-Dichlorobenzene	ND	1370	880	64		910	67		28-104	3		50
3,3'-Dichlorobenzidine	ND	1370	750	55		860	63		40-140	14		50
2,4-Dinitrotoluene	ND	1370	980	72		920	67		40-132	6		50
2,6-Dinitrotoluene	ND	1370	900	66		980	72		40-140	9		50
Fluoranthene	280	1370	990	52		1100	60		40-140	11		50
4-Chlorophenyl phenyl ether	ND	1370	890	65		840	62		40-140	6		50
4-Bromophenyl phenyl ether	ND	1370	830	61		850	62		40-140	2		50
Bis(2-chloroisopropyl)ether	ND	1370	770	56		830	61		40-140	8		50
Bis(2-chloroethoxy)methane	ND	1370	830	61		900	66		40-117	8		50
Hexachlorobutadiene	ND	1370	840	61		880	64		40-140	5		50
Hexachlorocyclopentadiene	ND	1370	280J	20	Q	300J	22	Q	40-140	7		50
Hexachloroethane	ND	1370	770	56		830	61		40-140	8		50
Isophorone	ND	1370	820	60		890	65		40-140	8		50
Naphthalene	23J	1370	930	68		960	70		40-140	3		50
Nitrobenzene	ND	1370	910	67		920	67		40-140	1		50
NDPA/DPA	ND	1370	820	60		870	64		36-157	6		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 QC Batch ID: WG1194798-4 WG1194798-5 QC Sample: L1900324-02												
Client ID: RB21_2-4												
n-Nitrosodi-n-propylamine	ND	1370	820	60		870	64		32-121	6		50
Bis(2-ethylhexyl)phthalate	ND	1370	1000	73		1100	81		40-140	10		50
Butyl benzyl phthalate	ND	1370	810	59		1000	73		40-140	21		50
Di-n-butylphthalate	ND	1370	990	72		1000	73		40-140	1		50
Di-n-octylphthalate	ND	1370	1300	95		1100	81		40-140	17		50
Diethyl phthalate	ND	1370	960	70		900	66		40-140	6		50
Dimethyl phthalate	ND	1370	810	59		960	70		40-140	17		50
Benzo(a)anthracene	120	1370	940	60		1000	64		40-140	6		50
Benzo(a)pyrene	120J	1370	1200	88		1000	73		40-140	18		50
Benzo(b)fluoranthene	180	1370	1200	75		1000	60		40-140	18		50
Benzo(k)fluoranthene	46J	1370	1000	73		980	72		40-140	2		50
Chrysene	140	1370	920	57		980	62		40-140	6		50
Acenaphthylene	ND	1370	850	62		1000	73		40-140	16		50
Anthracene	ND	1370	980	72		1000	73		40-140	2		50
Benzo(ghi)perylene	80J	1370	910	67		890	65		40-140	2		50
Fluorene	ND	1370	980	72		900	66		40-140	9		50
Phenanthrene	130	1370	1000	64		1000	64		40-140	0		50
Dibenzo(a,h)anthracene	ND	1370	840	61		810	59		40-140	4		50
Indeno(1,2,3-cd)pyrene	85J	1370	920	67		910	67		40-140	1		50
Pyrene	290	1370	940	48		1100	59		35-142	16		50
Biphenyl	ND	1370	860	63		1000	73		54-104	15		50
4-Chloroaniline	ND	1370	700	51		790	58		40-140	12		50
2-Nitroaniline	ND	1370	1000	73		1200	88		47-134	18		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 QC Batch ID: WG1194798-4 WG1194798-5 QC Sample: L1900324-02												
Client ID: RB21_2-4												
3-Nitroaniline	ND	1370	830	61		880	64		26-129	6		50
4-Nitroaniline	ND	1370	930	68		900	66		41-125	3		50
Dibenzofuran	ND	1370	890	65		910	67		40-140	2		50
2-Methylnaphthalene	ND	1370	800	59		940	69		40-140	16		50
1,2,4,5-Tetrachlorobenzene	ND	1370	870	64		1000	73		40-117	14		50
Acetophenone	ND	1370	910	67		960	70		14-144	5		50
2,4,6-Trichlorophenol	ND	1370	940	69		1000	73		30-130	6		50
p-Chloro-m-cresol	ND	1370	830	61		1000	73		26-103	19		50
2-Chlorophenol	ND	1370	900	66		1000	73		25-102	11		50
2,4-Dichlorophenol	ND	1370	980	72		1100	81		30-130	12		50
2,4-Dimethylphenol	ND	1370	880	64		950	70		30-130	8		50
2-Nitrophenol	ND	1370	980	72		970	71		30-130	1		50
4-Nitrophenol	ND	1370	920	67		860	63		11-114	7		50
2,4-Dinitrophenol	ND	1370	160J	12		160J	12		4-130	0		50
4,6-Dinitro-o-cresol	ND	1370	210J	15		190J	14		10-130	10		50
Pentachlorophenol	ND	1370	1100	80		880	64		17-109	22		50
Phenol	ND	1370	830	61		950	70		26-90	13		50
2-Methylphenol	ND	1370	920	67		970	71		30-130.	5		50
3-Methylphenol/4-Methylphenol	ND	1370	980	72		1000	73		30-130	2		50
2,4,5-Trichlorophenol	ND	1370	910	67		1100	81		30-130	19		50
Benzoic Acid	ND	1370	ND	0	Q	ND	0	Q	10-110	NC		50
Benzyl Alcohol	ND	1370	930	68		970	71		40-140	4		50
Carbazole	ND	1370	980	72		1000	73		54-128	2		50

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatiles Organics by GC/MS - Westborough Lab Associated sample(s): 02,04-08 QC Batch ID: WG1194798-4 WG1194798-5 QC Sample: L1900324-02
Client ID: RB21_2-4

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	69		72		10-136
2-Fluorobiphenyl	59		70		30-120
2-Fluorophenol	58		74		25-120
4-Terphenyl-d14	49		60		18-120
Nitrobenzene-d5	69		71		23-120
Phenol-d6	63		74		10-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 06:00
 Analyst: WR
 Percent Solids: 92%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.0	3.10	1	A
Aroclor 1221	ND		ug/kg	35.0	3.50	1	A
Aroclor 1232	ND		ug/kg	35.0	7.41	1	A
Aroclor 1242	ND		ug/kg	35.0	4.71	1	A
Aroclor 1248	ND		ug/kg	35.0	5.24	1	A
Aroclor 1254	ND		ug/kg	35.0	3.82	1	A
Aroclor 1260	ND		ug/kg	35.0	6.46	1	A
Aroclor 1262	ND		ug/kg	35.0	4.44	1	A
Aroclor 1268	ND		ug/kg	35.0	3.62	1	A
PCBs, Total	ND		ug/kg	35.0	3.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	50		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	46		30-150	B
Decachlorobiphenyl	33		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 05:23
 Analyst: WR
 Percent Solids: 95%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.2	2.95	1	A
Aroclor 1221	ND		ug/kg	33.2	3.33	1	A
Aroclor 1232	ND		ug/kg	33.2	7.04	1	A
Aroclor 1242	ND		ug/kg	33.2	4.48	1	A
Aroclor 1248	ND		ug/kg	33.2	4.98	1	A
Aroclor 1254	ND		ug/kg	33.2	3.64	1	A
Aroclor 1260	ND		ug/kg	33.2	6.14	1	A
Aroclor 1262	ND		ug/kg	33.2	4.22	1	A
Aroclor 1268	ND		ug/kg	33.2	3.44	1	A
PCBs, Total	ND		ug/kg	33.2	2.95	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	40		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 06:12
 Analyst: WR
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.1	3.03	1	A
Aroclor 1221	ND		ug/kg	34.1	3.42	1	A
Aroclor 1232	ND		ug/kg	34.1	7.24	1	A
Aroclor 1242	ND		ug/kg	34.1	4.60	1	A
Aroclor 1248	ND		ug/kg	34.1	5.12	1	A
Aroclor 1254	ND		ug/kg	34.1	3.74	1	A
Aroclor 1260	ND		ug/kg	34.1	6.31	1	A
Aroclor 1262	ND		ug/kg	34.1	4.34	1	A
Aroclor 1268	ND		ug/kg	34.1	3.54	1	A
PCBs, Total	ND		ug/kg	34.1	3.03	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	40		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
Client ID: RB22_0-2
Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/07/19 06:24
Analyst: WR
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 01/04/19 13:49
Cleanup Method: EPA 3665A
Cleanup Date: 01/05/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.9	3.10	1	A
Aroclor 1221	ND		ug/kg	34.9	3.49	1	A
Aroclor 1232	ND		ug/kg	34.9	7.39	1	A
Aroclor 1242	ND		ug/kg	34.9	4.70	1	A
Aroclor 1248	ND		ug/kg	34.9	5.23	1	A
Aroclor 1254	ND		ug/kg	34.9	3.82	1	A
Aroclor 1260	ND		ug/kg	34.9	6.44	1	A
Aroclor 1262	ND		ug/kg	34.9	4.43	1	A
Aroclor 1268	ND		ug/kg	34.9	3.61	1	A
PCBs, Total	ND		ug/kg	34.9	3.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	53		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 06:37
 Analyst: WR
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.3	3.14	1	A
Aroclor 1221	ND		ug/kg	35.3	3.54	1	A
Aroclor 1232	ND		ug/kg	35.3	7.49	1	A
Aroclor 1242	ND		ug/kg	35.3	4.76	1	A
Aroclor 1248	ND		ug/kg	35.3	5.30	1	A
Aroclor 1254	ND		ug/kg	35.3	3.87	1	A
Aroclor 1260	ND		ug/kg	35.3	6.53	1	A
Aroclor 1262	ND		ug/kg	35.3	4.49	1	A
Aroclor 1268	ND		ug/kg	35.3	3.66	1	A
PCBs, Total	ND		ug/kg	35.3	3.14	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	49		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 06:49
 Analyst: WR
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.8	3.18	1	A
Aroclor 1221	ND		ug/kg	35.8	3.59	1	A
Aroclor 1232	ND		ug/kg	35.8	7.59	1	A
Aroclor 1242	ND		ug/kg	35.8	4.83	1	A
Aroclor 1248	ND		ug/kg	35.8	5.37	1	A
Aroclor 1254	ND		ug/kg	35.8	3.92	1	A
Aroclor 1260	ND		ug/kg	35.8	6.62	1	A
Aroclor 1262	ND		ug/kg	35.8	4.55	1	A
Aroclor 1268	ND		ug/kg	35.8	3.71	1	A
PCBs, Total	ND		ug/kg	35.8	3.18	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	51		30-150	B
Decachlorobiphenyl	35		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/07/19 07:02
 Analyst: WR
 Percent Solids: 57%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 13:49
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/05/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	146	13.0	1	A
Aroclor 1221	ND		ug/kg	146	14.6	1	A
Aroclor 1232	ND		ug/kg	146	31.0	1	A
Aroclor 1242	ND		ug/kg	146	19.7	1	A
Aroclor 1248	ND		ug/kg	146	21.9	1	A
Aroclor 1254	ND		ug/kg	146	16.0	1	A
Aroclor 1260	ND		ug/kg	146	27.0	1	A
Aroclor 1262	ND		ug/kg	146	18.6	1	A
Aroclor 1268	ND		ug/kg	146	15.1	1	A
PCBs, Total	ND		ug/kg	146	13.0	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	45		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
Client ID: RB19_24-25
Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
Date Received: 01/03/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/07/19 07:14
Analyst: WR
Percent Solids: 66%

Extraction Method: EPA 3546
Extraction Date: 01/04/19 13:49
Cleanup Method: EPA 3665A
Cleanup Date: 01/05/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	48.9	4.34	1	A
Aroclor 1221	ND		ug/kg	48.9	4.90	1	A
Aroclor 1232	ND		ug/kg	48.9	10.4	1	A
Aroclor 1242	ND		ug/kg	48.9	6.59	1	A
Aroclor 1248	ND		ug/kg	48.9	7.33	1	A
Aroclor 1254	14.6	J	ug/kg	48.9	5.35	1	A
Aroclor 1260	ND		ug/kg	48.9	9.03	1	A
Aroclor 1262	ND		ug/kg	48.9	6.21	1	A
Aroclor 1268	ND		ug/kg	48.9	5.06	1	A
PCBs, Total	14.6	J	ug/kg	48.9	4.34	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	45		30-150	A
Decachlorobiphenyl	42		30-150	A
2,4,5,6-Tetrachloro-m-xylene	42		30-150	B
Decachlorobiphenyl	30		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 01/06/19 20:27
Analyst: HT

Extraction Method: EPA 3546
Extraction Date: 01/04/19 13:49
Cleanup Method: EPA 3665A
Cleanup Date: 01/05/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-08 Batch: WG1194865-1						
Aroclor 1016	ND		ug/kg	32.2	2.86	A
Aroclor 1221	ND		ug/kg	32.2	3.22	A
Aroclor 1232	ND		ug/kg	32.2	6.82	A
Aroclor 1242	ND		ug/kg	32.2	4.33	A
Aroclor 1248	ND		ug/kg	32.2	4.82	A
Aroclor 1254	ND		ug/kg	32.2	3.52	A
Aroclor 1260	ND		ug/kg	32.2	5.94	A
Aroclor 1262	ND		ug/kg	32.2	4.08	A
Aroclor 1268	ND		ug/kg	32.2	3.33	A
PCBs, Total	ND		ug/kg	32.2	2.86	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	71		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG1194865-2 WG1194865-3									
Aroclor 1016	78		70		40-140	11		50	A
Aroclor 1260	65		62		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		60		30-150	A
Decachlorobiphenyl	58		56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		64		30-150	B
Decachlorobiphenyl	71		68		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194865-4 WG1194865-5 QC Sample: L1900324-02 Client ID: RB21_2-4													
Aroclor 1016	ND	207	158	76		169	82		40-140	7		50	A
Aroclor 1260	ND	207	147	71		157	76		40-140	7		50	A

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
2,4,5,6-Tetrachloro-m-xylene	63		66		30-150	A
Decachlorobiphenyl	53		58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		64		30-150	B
Decachlorobiphenyl	42		45		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 16:17
 Analyst: BM
 Percent Solids: 92%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.68	0.328	1	A
Lindane	ND		ug/kg	0.699	0.312	1	A
Alpha-BHC	ND		ug/kg	0.699	0.198	1	A
Beta-BHC	ND		ug/kg	1.68	0.636	1	A
Heptachlor	ND		ug/kg	0.839	0.376	1	A
Aldrin	ND		ug/kg	1.68	0.591	1	A
Heptachlor epoxide	ND		ug/kg	3.14	0.944	1	A
Endrin	ND		ug/kg	0.699	0.286	1	A
Endrin aldehyde	ND		ug/kg	2.10	0.734	1	A
Endrin ketone	ND		ug/kg	1.68	0.432	1	A
Dieldrin	ND		ug/kg	1.05	0.524	1	A
4,4'-DDE	ND		ug/kg	1.68	0.388	1	A
4,4'-DDD	ND		ug/kg	1.68	0.598	1	A
4,4'-DDT	ND		ug/kg	3.14	1.35	1	A
Endosulfan I	ND		ug/kg	1.68	0.396	1	A
Endosulfan II	3.79	IP	ug/kg	1.68	0.560	1	A
Endosulfan sulfate	ND		ug/kg	0.699	0.333	1	A
Methoxychlor	ND		ug/kg	3.14	0.978	1	A
Toxaphene	ND		ug/kg	31.4	8.81	1	A
cis-Chlordane	ND		ug/kg	2.10	0.584	1	A
trans-Chlordane	ND		ug/kg	2.10	0.554	1	A
Chlordane	ND		ug/kg	13.6	5.56	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-01

Date Collected: 01/03/19 11:30

Client ID: RB21_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103		30-150	B
Decachlorobiphenyl	97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	136		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01
 Client ID: RB21_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:30
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 22:18
 Analyst: \DGM
 Percent Solids: 92%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	179	11.3	1	A
2,4,5-T	ND		ug/kg	179	5.55	1	A
2,4,5-TP (Silvex)	ND		ug/kg	179	4.76	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	84		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/05/19 15:20
 Analyst: KEG
 Percent Solids: 95%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.61	0.315	1	A
Lindane	ND		ug/kg	0.670	0.299	1	A
Alpha-BHC	ND		ug/kg	0.670	0.190	1	A
Beta-BHC	ND		ug/kg	1.61	0.609	1	A
Heptachlor	ND		ug/kg	0.804	0.360	1	A
Aldrin	ND		ug/kg	1.61	0.566	1	A
Heptachlor epoxide	ND		ug/kg	3.01	0.904	1	A
Endrin	ND		ug/kg	0.670	0.274	1	A
Endrin aldehyde	ND		ug/kg	2.01	0.703	1	A
Endrin ketone	ND		ug/kg	1.61	0.414	1	A
Dieldrin	ND		ug/kg	1.00	0.502	1	A
4,4'-DDE	ND		ug/kg	1.61	0.372	1	A
4,4'-DDD	ND		ug/kg	1.61	0.573	1	A
4,4'-DDT	ND		ug/kg	3.01	1.29	1	A
Endosulfan I	ND		ug/kg	1.61	0.380	1	A
Endosulfan II	ND		ug/kg	1.61	0.537	1	A
Endosulfan sulfate	ND		ug/kg	0.670	0.319	1	A
Methoxychlor	ND		ug/kg	3.01	0.937	1	A
Toxaphene	ND		ug/kg	30.1	8.44	1	A
cis-Chlordane	ND		ug/kg	2.01	0.560	1	A
trans-Chlordane	ND		ug/kg	2.01	0.530	1	A
Chlordane	ND		ug/kg	13.0	5.32	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-02

Date Collected: 01/03/19 11:35

Client ID: RB21_2-4

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	70		30-150	B
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	77		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02
 Client ID: RB21_2-4
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:35
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 22:37
 Analyst: \DGM
 Percent Solids: 95%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	174	11.0	1	A
2,4,5-T	ND		ug/kg	174	5.39	1	A
2,4,5-TP (Silvex)	ND		ug/kg	174	4.62	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	84		30-150	A
DCAA	70		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 16:30
 Analyst: BM
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.62	0.318	1	A
Lindane	ND		ug/kg	0.676	0.302	1	A
Alpha-BHC	ND		ug/kg	0.676	0.192	1	A
Beta-BHC	ND		ug/kg	1.62	0.615	1	A
Heptachlor	ND		ug/kg	0.812	0.364	1	A
Aldrin	ND		ug/kg	1.62	0.571	1	A
Heptachlor epoxide	ND		ug/kg	3.04	0.913	1	A
Endrin	ND		ug/kg	0.676	0.277	1	A
Endrin aldehyde	ND		ug/kg	2.03	0.710	1	A
Endrin ketone	ND		ug/kg	1.62	0.418	1	A
Dieldrin	ND		ug/kg	1.01	0.507	1	A
4,4'-DDE	ND		ug/kg	1.62	0.375	1	A
4,4'-DDD	ND		ug/kg	1.62	0.579	1	A
4,4'-DDT	ND		ug/kg	3.04	1.30	1	A
Endosulfan I	ND		ug/kg	1.62	0.383	1	A
Endosulfan II	0.810	JIP	ug/kg	1.62	0.542	1	A
Endosulfan sulfate	ND		ug/kg	0.676	0.322	1	A
Methoxychlor	ND		ug/kg	3.04	0.947	1	A
Toxaphene	ND		ug/kg	30.4	8.52	1	A
cis-Chlordane	ND		ug/kg	2.03	0.565	1	A
trans-Chlordane	ND		ug/kg	2.03	0.536	1	A
Chlordane	ND		ug/kg	13.2	5.38	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	112		30-150	B
Decachlorobiphenyl	92		30-150	B
2,4,5,6-Tetrachloro-m-xylene	104		30-150	A
Decachlorobiphenyl	78		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03
 Client ID: RB21_18-20
 Sample Location: BRONX, NY

Date Collected: 01/03/19 11:40
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 22:56
 Analyst: \DGM
 Percent Solids: 96%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	173	10.9	1	A
2,4,5-T	ND		ug/kg	173	5.35	1	A
2,4,5-TP (Silvex)	ND		ug/kg	173	4.59	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	85		30-150	A
DCAA	79		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 16:42
 Analyst: BM
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.346	1	A
Lindane	ND		ug/kg	0.737	0.330	1	A
Alpha-BHC	ND		ug/kg	0.737	0.209	1	A
Beta-BHC	ND		ug/kg	1.77	0.671	1	A
Heptachlor	ND		ug/kg	0.885	0.397	1	A
Aldrin	ND		ug/kg	1.77	0.623	1	A
Heptachlor epoxide	ND		ug/kg	3.32	0.995	1	A
Endrin	ND		ug/kg	0.737	0.302	1	A
Endrin aldehyde	ND		ug/kg	2.21	0.774	1	A
Endrin ketone	ND		ug/kg	1.77	0.456	1	A
Dieldrin	ND		ug/kg	1.10	0.553	1	A
4,4'-DDE	ND		ug/kg	1.77	0.409	1	A
4,4'-DDD	ND		ug/kg	1.77	0.631	1	A
4,4'-DDT	ND		ug/kg	3.32	1.42	1	A
Endosulfan I	ND		ug/kg	1.77	0.418	1	A
Endosulfan II	ND	IP	ug/kg	1.77	0.591	1	A
Endosulfan sulfate	ND		ug/kg	0.737	0.351	1	A
Methoxychlor	ND		ug/kg	3.32	1.03	1	A
Toxaphene	ND		ug/kg	33.2	9.29	1	A
cis-Chlordane	ND		ug/kg	2.21	0.616	1	A
trans-Chlordane	ND		ug/kg	2.21	0.584	1	A
Chlordane	ND		ug/kg	14.4	5.86	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	105		30-150	B
Decachlorobiphenyl	90		30-150	B
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	92		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04
 Client ID: RB22_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 23:14
 Analyst: \DGM
 Percent Solids: 90%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.70	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.89	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 16:55
 Analyst: BM
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.346	1	A
Lindane	ND		ug/kg	0.737	0.329	1	A
Alpha-BHC	ND		ug/kg	0.737	0.209	1	A
Beta-BHC	ND		ug/kg	1.77	0.670	1	A
Heptachlor	ND		ug/kg	0.884	0.396	1	A
Aldrin	ND		ug/kg	1.77	0.623	1	A
Heptachlor epoxide	ND		ug/kg	3.32	0.995	1	A
Endrin	ND		ug/kg	0.737	0.302	1	A
Endrin aldehyde	ND		ug/kg	2.21	0.774	1	A
Endrin ketone	ND		ug/kg	1.77	0.455	1	A
Dieldrin	ND		ug/kg	1.10	0.553	1	A
4,4'-DDE	0.619	JIP	ug/kg	1.77	0.409	1	A
4,4'-DDD	ND		ug/kg	1.77	0.631	1	A
4,4'-DDT	ND		ug/kg	3.32	1.42	1	A
Endosulfan I	ND		ug/kg	1.77	0.418	1	A
Endosulfan II	ND		ug/kg	1.77	0.591	1	A
Endosulfan sulfate	ND		ug/kg	0.737	0.351	1	A
Methoxychlor	ND		ug/kg	3.32	1.03	1	A
Toxaphene	ND		ug/kg	33.2	9.28	1	A
cis-Chlordane	ND		ug/kg	2.21	0.616	1	A
trans-Chlordane	ND		ug/kg	2.21	0.584	1	A
Chlordane	ND		ug/kg	14.4	5.86	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	84		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	70		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05
 Client ID: RB22_3-5
 Sample Location: BRONX, NY

Date Collected: 01/03/19 13:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 23:33
 Analyst: \DGM
 Percent Solids: 90%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	185	11.6	1	A
2,4,5-T	ND		ug/kg	185	5.72	1	A
2,4,5-TP (Silvex)	ND		ug/kg	185	4.91	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 17:07
 Analyst: BM
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.71	0.334	1	A
Lindane	ND		ug/kg	0.711	0.318	1	A
Alpha-BHC	ND		ug/kg	0.711	0.202	1	A
Beta-BHC	ND		ug/kg	1.71	0.647	1	A
Heptachlor	ND		ug/kg	0.854	0.383	1	A
Aldrin	ND		ug/kg	1.71	0.601	1	A
Heptachlor epoxide	ND		ug/kg	3.20	0.960	1	A
Endrin	ND		ug/kg	0.711	0.292	1	A
Endrin aldehyde	ND		ug/kg	2.13	0.747	1	A
Endrin ketone	ND		ug/kg	1.71	0.440	1	A
Dieldrin	ND		ug/kg	1.07	0.533	1	A
4,4'-DDE	ND		ug/kg	1.71	0.395	1	A
4,4'-DDD	ND		ug/kg	1.71	0.609	1	A
4,4'-DDT	ND		ug/kg	3.20	1.37	1	A
Endosulfan I	ND		ug/kg	1.71	0.403	1	A
Endosulfan II	ND	IP	ug/kg	1.71	0.570	1	A
Endosulfan sulfate	ND		ug/kg	0.711	0.338	1	A
Methoxychlor	ND		ug/kg	3.20	0.996	1	A
Toxaphene	ND		ug/kg	32.0	8.96	1	A
cis-Chlordane	ND		ug/kg	2.13	0.595	1	A
trans-Chlordane	ND		ug/kg	2.13	0.563	1	A
Chlordane	ND		ug/kg	13.9	5.65	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	70		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06
 Client ID: RB19_0-2
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:00
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/06/19 23:52
 Analyst: \DGM
 Percent Solids: 89%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	A
2,4,5-T	ND		ug/kg	183	5.66	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	80		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 17:20
 Analyst: BM
 Percent Solids: 57%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	7.25	1.42	1	A
Lindane	ND		ug/kg	3.02	1.35	1	A
Alpha-BHC	ND		ug/kg	3.02	0.857	1	A
Beta-BHC	ND		ug/kg	7.25	2.75	1	A
Heptachlor	ND		ug/kg	3.62	1.62	1	A
Aldrin	ND		ug/kg	7.25	2.55	1	A
Heptachlor epoxide	ND		ug/kg	13.6	4.08	1	A
Endrin	ND		ug/kg	3.02	1.24	1	A
Endrin aldehyde	ND		ug/kg	9.06	3.17	1	A
Endrin ketone	ND		ug/kg	7.25	1.86	1	A
Dieldrin	ND		ug/kg	4.53	2.26	1	A
4,4'-DDE	ND		ug/kg	7.25	1.68	1	A
4,4'-DDD	ND		ug/kg	7.25	2.58	1	A
4,4'-DDT	ND		ug/kg	13.6	5.83	1	A
Endosulfan I	ND		ug/kg	7.25	1.71	1	A
Endosulfan II	ND		ug/kg	7.25	2.42	1	A
Endosulfan sulfate	ND		ug/kg	3.02	1.44	1	A
Methoxychlor	ND		ug/kg	13.6	4.23	1	A
Toxaphene	ND		ug/kg	136	38.0	1	A
cis-Chlordane	ND		ug/kg	9.06	2.52	1	A
trans-Chlordane	ND		ug/kg	9.06	2.39	1	A
Chlordane	ND		ug/kg	58.9	24.0	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	105		30-150	B
Decachlorobiphenyl	101		30-150	B
2,4,5,6-Tetrachloro-m-xylene	1650	Q	30-150	A
Decachlorobiphenyl	67		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07
 Client ID: RB19_20-22
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:05
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/07/19 00:11
 Analyst: \DGM
 Percent Solids: 57%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	285	18.0	1	A
2,4,5-T	ND		ug/kg	285	8.84	1	A
2,4,5-TP (Silvex)	ND		ug/kg	285	7.59	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	83		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/06/19 17:32
 Analyst: BM
 Percent Solids: 66%

Extraction Method: EPA 3546
 Extraction Date: 01/04/19 12:07
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.33	0.456	1	A
Lindane	ND		ug/kg	0.971	0.434	1	A
Alpha-BHC	ND		ug/kg	0.971	0.276	1	A
Beta-BHC	ND		ug/kg	2.33	0.883	1	A
Heptachlor	ND		ug/kg	1.16	0.522	1	A
Aldrin	ND		ug/kg	2.33	0.820	1	A
Heptachlor epoxide	ND		ug/kg	4.37	1.31	1	A
Endrin	ND		ug/kg	0.971	0.398	1	A
Endrin aldehyde	ND		ug/kg	2.91	1.02	1	A
Endrin ketone	ND		ug/kg	2.33	0.600	1	A
Dieldrin	ND		ug/kg	1.46	0.728	1	A
4,4'-DDE	ND		ug/kg	2.33	0.539	1	A
4,4'-DDD	ND		ug/kg	2.33	0.831	1	A
4,4'-DDT	ND		ug/kg	4.37	1.87	1	A
Endosulfan I	ND		ug/kg	2.33	0.550	1	A
Endosulfan II	ND		ug/kg	2.33	0.778	1	A
Endosulfan sulfate	ND		ug/kg	0.971	0.462	1	A
Methoxychlor	ND		ug/kg	4.37	1.36	1	A
Toxaphene	ND		ug/kg	43.7	12.2	1	A
cis-Chlordane	ND		ug/kg	2.91	0.812	1	A
trans-Chlordane	ND		ug/kg	2.91	0.769	1	A
Chlordane	ND		ug/kg	18.9	7.72	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	82		30-150	B
2,4,5,6-Tetrachloro-m-xylene	5140	Q	30-150	A
Decachlorobiphenyl	39		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08
 Client ID: RB19_24-25
 Sample Location: BRONX, NY

Date Collected: 01/03/19 14:10
 Date Received: 01/03/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/07/19 00:30
 Analyst: \DGM
 Percent Solids: 66%
 Methylation Date: 01/05/19 20:45

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	244	15.4	1	A
2,4,5-T	ND		ug/kg	244	7.56	1	A
2,4,5-TP (Silvex)	ND		ug/kg	244	6.49	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	96		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/05/19 14:16
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 12:07
Cleanup Method: EPA 3620B
Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-08 Batch: WG1194837-1						
Delta-BHC	ND		ug/kg	1.55	0.303	A
Lindane	ND		ug/kg	0.646	0.288	A
Alpha-BHC	ND		ug/kg	0.646	0.183	A
Beta-BHC	ND		ug/kg	1.55	0.587	A
Heptachlor	ND		ug/kg	0.775	0.347	A
Aldrin	ND		ug/kg	1.55	0.546	A
Heptachlor epoxide	ND		ug/kg	2.90	0.872	A
Endrin	ND		ug/kg	0.646	0.265	A
Endrin aldehyde	ND		ug/kg	1.94	0.678	A
Endrin ketone	ND		ug/kg	1.55	0.399	A
Dieldrin	ND		ug/kg	0.968	0.484	A
4,4'-DDE	ND		ug/kg	1.55	0.358	A
4,4'-DDD	ND		ug/kg	1.55	0.553	A
4,4'-DDT	ND		ug/kg	2.90	1.24	A
Endosulfan I	ND		ug/kg	1.55	0.366	A
Endosulfan II	ND		ug/kg	1.55	0.518	A
Endosulfan sulfate	ND		ug/kg	0.646	0.307	A
Methoxychlor	ND		ug/kg	2.90	0.904	A
Toxaphene	ND		ug/kg	29.0	8.13	A
cis-Chlordane	ND		ug/kg	1.94	0.540	A
trans-Chlordane	ND		ug/kg	1.94	0.511	A
Chlordane	ND		ug/kg	12.6	5.13	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8081B
Analytical Date: 01/05/19 14:16
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 01/04/19 12:07
Cleanup Method: EPA 3620B
Cleanup Date: 01/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-08 Batch: WG1194837-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	94		30-150	B
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	100		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/06/19 20:06
 Analyst: DGM

Extraction Method: EPA 8151A
 Extraction Date: 01/05/19 00:59

Methylation Date: 01/05/19 20:45

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-08 Batch: WG1194983-1						
2,4-D	ND		ug/kg	166	10.4	A
2,4,5-T	ND		ug/kg	166	5.14	A
2,4,5-TP (Silvex)	ND		ug/kg	166	4.41	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	90		30-150	A
DCAA	84		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG1194837-2 WG1194837-3									
Delta-BHC	98		104		30-150	6		30	A
Lindane	103		107		30-150	4		30	A
Alpha-BHC	110		114		30-150	4		30	A
Beta-BHC	93		106		30-150	13		30	A
Heptachlor	106		109		30-150	3		30	A
Aldrin	96		100		30-150	4		30	A
Heptachlor epoxide	103		106		30-150	3		30	A
Endrin	107		113		30-150	5		30	A
Endrin aldehyde	71		82		30-150	14		30	A
Endrin ketone	94		106		30-150	12		30	A
Dieldrin	112		117		30-150	4		30	A
4,4'-DDE	97		100		30-150	3		30	A
4,4'-DDD	103		108		30-150	5		30	A
4,4'-DDT	108		113		30-150	5		30	A
Endosulfan I	93		96		30-150	3		30	A
Endosulfan II	95		104		30-150	9		30	A
Endosulfan sulfate	76		87		30-150	13		30	A
Methoxychlor	106		121		30-150	13		30	A
cis-Chlordane	78		81		30-150	4		30	A
trans-Chlordane	76		71		30-150	7		30	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG1194837-2 WG1194837-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	77		82		30-150	B
Decachlorobiphenyl	83		91		30-150	B
2,4,5,6-Tetrachloro-m-xylene	81		84		30-150	A
Decachlorobiphenyl	92		97		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-08 Batch: WG1194983-2 WG1194983-3									
2,4-D	90		93		30-150	3		30	A
2,4,5-T	96		100		30-150	4		30	A
2,4,5-TP (Silvex)	84		87		30-150	4		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	90		96		30-150	A
DCAA	87		91		30-150	B



Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab ID: RB21_2-4 Associated sample(s): 01-08 QC Batch ID: WG1194837-4 WG1194837-5 QC Sample: L1900324-02 Client													
Delta-BHC	ND	33.2	36.4P	110		35.3	105		30-150	3		50	A
Lindane	ND	33.2	37.0	111		37.5	111		30-150	1		50	A
Alpha-BHC	ND	33.2	38.4	116		39.2	116		30-150	2		50	A
Beta-BHC	ND	33.2	31.7	95		31.0	92		30-150	2		50	A
Heptachlor	ND	33.2	38.6P	116		37.7	112		30-150	2		50	A
Aldrin	ND	33.2	34.3	103		32.8	98		30-150	4		50	A
Heptachlor epoxide	ND	33.2	35.8P	108		35.1	104		30-150	2		50	A
Endrin	ND	33.2	37.6	113		37.3	111		30-150	1		50	A
Endrin aldehyde	ND	33.2	23.5	71		22.2	66		30-150	6		50	A
Endrin ketone	ND	33.2	32.8	99		31.7	94		30-150	3		50	A
Dieldrin	ND	33.2	39.4	119		38.8	115		30-150	2		50	A
4,4'-DDE	ND	33.2	29.2	88		29.2	87		30-150	0		50	A
4,4'-DDD	ND	33.2	34.2	103		34.4	102		30-150	1		50	A
4,4'-DDT	ND	33.2	36.6	110		36.7	109		30-150	0		50	A
Endosulfan I	ND	33.2	32.2	97		32.3	96		30-150	0		50	A
Endosulfan II	ND	33.2	33.6	101		33.1	98		30-150	1		50	A
Endosulfan sulfate	ND	33.2	24.0	72		23.6	70		30-150	2		50	A
Methoxychlor	ND	33.2	36.4	110		35.7	106		30-150	2		50	A
cis-Chlordane	ND	33.2	27.4	83		27.2	81		30-150	1		50	A
trans-Chlordane	ND	33.2	25.7	77		23.1	69		30-150	11		50	A

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194837-4 WG1194837-5 QC Sample: L1900324-02 Client ID: RB21_2-4

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	78		75		30-150	B
Decachlorobiphenyl	64		69		30-150	B
2,4,5,6-Tetrachloro-m-xylene	83		86		30-150	A
Decachlorobiphenyl	87		87		30-150	A

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194983-4 WG1194983-5 QC Sample: L1900324-02 Client ID: RB21_2-4													
2,4-D	ND	173	159J	92		161J	93		30-150	1		30	A
2,4,5-T	ND	173	175	101		178	103		30-150	2		30	A
2,4,5-TP (Silvex)	ND	173	153J	88		157J	91		30-150	3		30	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
DCAA	101		107		30-150	A
DCAA	87		92		30-150	B

METALS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-01

Date Collected: 01/03/19 11:30

Client ID: RB21_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5110		mg/kg	8.49	2.29	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Antimony, Total	6.53		mg/kg	4.24	0.323	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Arsenic, Total	10.4		mg/kg	0.849	0.177	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Barium, Total	260		mg/kg	0.849	0.148	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Beryllium, Total	0.153	J	mg/kg	0.424	0.028	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Cadmium, Total	0.968		mg/kg	0.849	0.083	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Calcium, Total	34000		mg/kg	8.49	2.97	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Chromium, Total	10.9		mg/kg	0.849	0.082	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Cobalt, Total	4.56		mg/kg	1.70	0.141	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Copper, Total	47.0		mg/kg	0.849	0.219	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Iron, Total	15000		mg/kg	4.24	0.767	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Lead, Total	2940		mg/kg	4.24	0.228	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Magnesium, Total	4210		mg/kg	8.49	1.31	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Manganese, Total	241		mg/kg	0.849	0.135	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Mercury, Total	0.881		mg/kg	0.068	0.014	1	01/05/19 07:00	01/08/19 20:44	EPA 7471B	1,7471B	EA
Nickel, Total	10.7		mg/kg	2.12	0.205	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Potassium, Total	808		mg/kg	212	12.2	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Selenium, Total	1.38	J	mg/kg	1.70	0.219	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Silver, Total	0.450	J	mg/kg	0.849	0.240	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Sodium, Total	616		mg/kg	170	2.67	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.70	0.267	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Vanadium, Total	14.9		mg/kg	0.849	0.172	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
Zinc, Total	874		mg/kg	4.24	0.249	2	01/04/19 18:55	01/08/19 01:07	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.87	0.87	1		01/08/19 01:07	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-02

Date Collected: 01/03/19 11:35

Client ID: RB21_2-4

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6910		mg/kg	8.28	2.23	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.14	0.314	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Arsenic, Total	9.28		mg/kg	0.828	0.172	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Barium, Total	153		mg/kg	0.828	0.144	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.414	0.027	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Cadmium, Total	0.712	J	mg/kg	0.828	0.081	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Calcium, Total	57200		mg/kg	8.28	2.90	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Chromium, Total	14.0		mg/kg	0.828	0.079	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Cobalt, Total	7.18		mg/kg	1.66	0.137	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Copper, Total	191		mg/kg	0.828	0.214	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Iron, Total	21500		mg/kg	41.4	7.47	20	01/04/19 18:55	01/08/19 03:46	EPA 3050B	1,6010D	MC
Lead, Total	304		mg/kg	4.14	0.222	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Magnesium, Total	5000		mg/kg	8.28	1.27	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Manganese, Total	236		mg/kg	0.828	0.132	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Mercury, Total	0.520		mg/kg	0.066	0.014	1	01/05/19 07:00	01/08/19 20:15	EPA 7471B	1,7471B	EA
Nickel, Total	13.8		mg/kg	2.07	0.200	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Potassium, Total	1680		mg/kg	207	11.9	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Selenium, Total	0.720	J	mg/kg	1.66	0.214	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Silver, Total	0.256	J	mg/kg	0.828	0.234	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Sodium, Total	270		mg/kg	166	2.61	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.66	0.261	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Vanadium, Total	21.5		mg/kg	0.828	0.168	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
Zinc, Total	212		mg/kg	4.14	0.242	2	01/04/19 18:55	01/07/19 22:41	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14		mg/kg	0.84	0.85	1		01/07/19 22:41	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	12200		mg/kg	8.22	2.22	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.11	0.312	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Arsenic, Total	1.37		mg/kg	0.822	0.171	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Barium, Total	142		mg/kg	0.822	0.143	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.411	0.027	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Cadmium, Total	0.485	J	mg/kg	0.822	0.081	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Calcium, Total	9590		mg/kg	8.22	2.88	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Chromium, Total	27.9		mg/kg	0.822	0.079	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Cobalt, Total	19.7		mg/kg	1.64	0.136	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Copper, Total	54.0		mg/kg	0.822	0.212	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Iron, Total	26400		mg/kg	4.11	0.742	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Lead, Total	19.6		mg/kg	4.11	0.220	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Magnesium, Total	10600		mg/kg	8.22	1.26	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Manganese, Total	312		mg/kg	0.822	0.131	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.066	0.014	1	01/05/19 07:00	01/08/19 20:46	EPA 7471B	1,7471B	EA
Nickel, Total	24.3		mg/kg	2.05	0.199	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Potassium, Total	6430		mg/kg	205	11.8	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Selenium, Total	0.567	J	mg/kg	1.64	0.212	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.822	0.232	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Sodium, Total	159	J	mg/kg	164	2.59	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.64	0.259	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Vanadium, Total	41.1		mg/kg	0.822	0.167	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
Zinc, Total	78.5		mg/kg	4.11	0.241	2	01/04/19 18:55	01/08/19 01:11	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	28		mg/kg	0.83	0.83	1		01/08/19 01:11	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04

Date Collected: 01/03/19 13:00

Client ID: RB22_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4240		mg/kg	8.76	2.36	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.38	0.333	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Arsenic, Total	3.67		mg/kg	0.876	0.182	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Barium, Total	121		mg/kg	0.876	0.152	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Beryllium, Total	0.053	J	mg/kg	0.438	0.029	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Cadmium, Total	0.456	J	mg/kg	0.876	0.086	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Calcium, Total	35700		mg/kg	8.76	3.07	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Chromium, Total	9.84		mg/kg	0.876	0.084	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Cobalt, Total	4.45		mg/kg	1.75	0.145	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Copper, Total	32.5		mg/kg	0.876	0.226	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Iron, Total	10800		mg/kg	4.38	0.791	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Lead, Total	425		mg/kg	4.38	0.235	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Magnesium, Total	6820		mg/kg	8.76	1.35	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Manganese, Total	212		mg/kg	0.876	0.139	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Mercury, Total	0.318		mg/kg	0.070	0.015	1	01/05/19 07:00	01/08/19 20:48	EPA 7471B	1,7471B	EA
Nickel, Total	8.81		mg/kg	2.19	0.212	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Potassium, Total	866		mg/kg	219	12.6	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Selenium, Total	0.727	J	mg/kg	1.75	0.226	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.876	0.248	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Sodium, Total	185		mg/kg	175	2.76	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.75	0.276	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Vanadium, Total	13.3		mg/kg	0.876	0.178	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
Zinc, Total	171		mg/kg	4.38	0.257	2	01/04/19 18:55	01/08/19 01:16	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	9.8		mg/kg	0.89	0.89	1		01/08/19 01:16	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	13100		mg/kg	8.85	2.39	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.43	0.336	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Arsenic, Total	2.43		mg/kg	0.885	0.184	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Barium, Total	187		mg/kg	0.885	0.154	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.443	0.029	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Cadmium, Total	0.620	J	mg/kg	0.885	0.087	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Calcium, Total	22800		mg/kg	8.85	3.10	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Chromium, Total	24.8		mg/kg	0.885	0.085	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Cobalt, Total	17.8		mg/kg	1.77	0.147	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Copper, Total	81.5		mg/kg	0.885	0.228	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Iron, Total	29900		mg/kg	4.43	0.800	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Lead, Total	77.4		mg/kg	4.43	0.237	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Magnesium, Total	11600		mg/kg	8.85	1.36	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Manganese, Total	376		mg/kg	0.885	0.141	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Mercury, Total	0.200		mg/kg	0.071	0.015	1	01/05/19 07:00	01/08/19 20:50	EPA 7471B	1,7471B	EA
Nickel, Total	24.7		mg/kg	2.21	0.214	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Potassium, Total	7630		mg/kg	221	12.8	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Selenium, Total	0.434	J	mg/kg	1.77	0.228	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.885	0.250	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Sodium, Total	315		mg/kg	177	2.79	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.77	0.279	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Vanadium, Total	38.9		mg/kg	0.885	0.180	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
Zinc, Total	132		mg/kg	4.43	0.259	2	01/04/19 18:55	01/08/19 01:20	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	25		mg/kg	0.89	0.89	1		01/08/19 01:20	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900324**Project Number:** 170487001**Report Date:** 01/10/19**SAMPLE RESULTS**

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9090		mg/kg	8.46	2.28	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.23	0.321	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Arsenic, Total	12.3		mg/kg	0.846	0.176	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Barium, Total	1210		mg/kg	0.846	0.147	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Beryllium, Total	0.068	J	mg/kg	0.423	0.028	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Cadmium, Total	0.778	J	mg/kg	0.846	0.083	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Calcium, Total	8680		mg/kg	8.46	2.96	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Chromium, Total	16.8		mg/kg	0.846	0.081	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Cobalt, Total	9.79		mg/kg	1.69	0.140	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Copper, Total	52.1		mg/kg	0.846	0.218	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Iron, Total	24800		mg/kg	4.23	0.764	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Lead, Total	366		mg/kg	4.23	0.227	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Magnesium, Total	4980		mg/kg	8.46	1.30	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Manganese, Total	400		mg/kg	0.846	0.134	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Mercury, Total	2.32		mg/kg	0.071	0.015	1	01/05/19 07:00	01/08/19 20:52	EPA 7471B	1,7471B	EA
Nickel, Total	14.5		mg/kg	2.11	0.205	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Potassium, Total	1750		mg/kg	211	12.2	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Selenium, Total	1.46	J	mg/kg	1.69	0.218	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.846	0.239	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Sodium, Total	215		mg/kg	169	2.66	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.69	0.266	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Vanadium, Total	24.2		mg/kg	0.846	0.172	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
Zinc, Total	1200		mg/kg	4.23	0.248	2	01/04/19 18:55	01/08/19 01:25	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	16	J	mg/kg	0.90	0.90	1		01/08/19 01:25	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07

Date Collected: 01/03/19 14:05

Client ID: RB19_20-22

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 57%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	14700		mg/kg	13.8	3.73	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	6.90	0.524	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Arsenic, Total	17.0		mg/kg	1.38	0.287	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Barium, Total	70.4		mg/kg	1.38	0.240	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Beryllium, Total	0.373	J	mg/kg	0.690	0.046	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Cadmium, Total	1.04	J	mg/kg	1.38	0.135	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Calcium, Total	3300		mg/kg	13.8	4.83	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Chromium, Total	40.0		mg/kg	1.38	0.132	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Cobalt, Total	11.2		mg/kg	2.76	0.229	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Copper, Total	78.2		mg/kg	1.38	0.356	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Iron, Total	30800		mg/kg	6.90	1.25	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Lead, Total	203		mg/kg	6.90	0.370	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Magnesium, Total	6350		mg/kg	13.8	2.12	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Manganese, Total	449		mg/kg	1.38	0.219	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Mercury, Total	4.38		mg/kg	0.218	0.046	2	01/05/19 07:00	01/09/19 00:01	EPA 7471B	1,7471B	EA
Nickel, Total	22.9		mg/kg	3.45	0.334	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Potassium, Total	2970		mg/kg	345	19.9	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Selenium, Total	1.62	J	mg/kg	2.76	0.356	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Silver, Total	0.497	J	mg/kg	1.38	0.391	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Sodium, Total	558		mg/kg	276	4.35	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.76	0.435	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Vanadium, Total	37.8		mg/kg	1.38	0.280	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
Zinc, Total	177		mg/kg	6.90	0.404	2	01/04/19 18:55	01/08/19 01:30	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	40		mg/kg	1.4	1.4	1		01/08/19 01:30	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 66%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	13800		mg/kg	11.6	3.14	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	5.82	0.442	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Arsenic, Total	17.8		mg/kg	1.16	0.242	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Barium, Total	80.2		mg/kg	1.16	0.202	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Beryllium, Total	0.256	J	mg/kg	0.582	0.038	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Cadmium, Total	1.09	J	mg/kg	1.16	0.114	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Calcium, Total	2500		mg/kg	11.6	4.07	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Chromium, Total	36.8		mg/kg	1.16	0.112	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Cobalt, Total	10.9		mg/kg	2.33	0.193	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Copper, Total	96.5		mg/kg	1.16	0.300	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Iron, Total	29000		mg/kg	5.82	1.05	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Lead, Total	252		mg/kg	5.82	0.312	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Magnesium, Total	6020		mg/kg	11.6	1.79	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Manganese, Total	292		mg/kg	1.16	0.185	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Mercury, Total	3.75		mg/kg	0.095	0.020	1	01/05/19 07:00	01/08/19 21:00	EPA 7471B	1,7471B	EA
Nickel, Total	21.4		mg/kg	2.91	0.282	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Potassium, Total	2920		mg/kg	291	16.8	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Selenium, Total	1.36	J	mg/kg	2.33	0.300	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Silver, Total	0.663	J	mg/kg	1.16	0.329	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Sodium, Total	601		mg/kg	233	3.66	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	2.33	0.366	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Vanadium, Total	33.8		mg/kg	1.16	0.236	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
Zinc, Total	226		mg/kg	5.82	0.341	2	01/04/19 18:55	01/08/19 01:34	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	37		mg/kg	1.2	1.2	1		01/08/19 01:34	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-08 Batch: WG1194873-1									
Aluminum, Total	ND	mg/kg	4.00	1.08	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Antimony, Total	ND	mg/kg	2.00	0.152	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Arsenic, Total	ND	mg/kg	0.400	0.083	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Barium, Total	ND	mg/kg	0.400	0.070	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Beryllium, Total	ND	mg/kg	0.200	0.013	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Cadmium, Total	ND	mg/kg	0.400	0.039	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Calcium, Total	ND	mg/kg	4.00	1.40	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Chromium, Total	ND	mg/kg	0.400	0.038	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Cobalt, Total	ND	mg/kg	0.800	0.066	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Copper, Total	ND	mg/kg	0.400	0.103	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Iron, Total	ND	mg/kg	2.00	0.361	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Lead, Total	ND	mg/kg	2.00	0.107	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Magnesium, Total	ND	mg/kg	4.00	0.616	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Manganese, Total	ND	mg/kg	0.400	0.064	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Nickel, Total	ND	mg/kg	1.00	0.097	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Potassium, Total	ND	mg/kg	100	5.76	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Selenium, Total	ND	mg/kg	0.800	0.103	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Silver, Total	ND	mg/kg	0.400	0.113	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Sodium, Total	ND	mg/kg	80.0	1.26	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Thallium, Total	ND	mg/kg	0.800	0.126	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Vanadium, Total	ND	mg/kg	0.400	0.081	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC
Zinc, Total	ND	mg/kg	2.00	0.117	1	01/04/19 18:55	01/07/19 21:42	1,6010D	MC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-08 Batch: WG1195001-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	01/05/19 07:00	01/08/19 20:11	1,7471B	EA



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1194873-2 SRM Lot Number: D102-540								
Aluminum, Total	66		-		49-150	-		
Antimony, Total	139		-		1-199	-		
Arsenic, Total	98		-		83-117	-		
Barium, Total	89		-		83-118	-		
Beryllium, Total	90		-		83-116	-		
Cadmium, Total	98		-		83-118	-		
Calcium, Total	84		-		82-118	-		
Chromium, Total	90		-		83-117	-		
Cobalt, Total	93		-		84-116	-		
Copper, Total	88		-		84-116	-		
Iron, Total	87		-		61-139	-		
Lead, Total	94		-		82-118	-		
Magnesium, Total	79		-		76-124	-		
Manganese, Total	89		-		82-118	-		
Nickel, Total	93		-		83-117	-		
Potassium, Total	75		-		70-130	-		
Selenium, Total	98		-		79-121	-		
Silver, Total	92		-		80-120	-		
Sodium, Total	92		-		74-126	-		
Thallium, Total	97		-		81-119	-		
Vanadium, Total	88		-		80-120	-		



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1194873-2 SRM Lot Number: D102-540					
Zinc, Total	94	-	81-118	-	
Total Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1195001-2 SRM Lot Number: D102-540					
Mercury, Total	104	-	65-134	-	

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1194873-3 WG1194873-4 QC Sample: L1900324-02 Client ID: RB21_2-4												
Aluminum, Total	6910	166	6630	0	Q	6160	0	Q	75-125	7		20
Antimony, Total	ND	41.5	30.6	74	Q	30.2	75		75-125	1		20
Arsenic, Total	9.28	9.96	23.3	141	Q	16.6	76		75-125	34	Q	20
Barium, Total	153	166	352	120		317	102		75-125	10		20
Beryllium, Total	ND	4.15	3.65	88		3.48	87		75-125	5		20
Cadmium, Total	0.712J	4.23	4.93	116		4.43	108		75-125	11		20
Calcium, Total	57200	830	78600	2580	Q	76500	2410	Q	75-125	3		20
Chromium, Total	14.0	16.6	28.9	90		25.8	74	Q	75-125	11		20
Cobalt, Total	7.18	41.5	44.6	90		40.3	83		75-125	10		20
Copper, Total	191	20.8	204	63	Q	208	85		75-125	2		20
Iron, Total	21500	83	35000	16300	Q	20000	0	Q	75-125	55	Q	20
Lead, Total	304	42.3	342	90		313	22	Q	75-125	9		20
Magnesium, Total	5000	830	7520	304	Q	5510	64	Q	75-125	31	Q	20
Manganese, Total	236	41.5	319	200	Q	268	80		75-125	17		20
Nickel, Total	13.8	41.5	50.9	89		45.0	78		75-125	12		20
Potassium, Total	1680	830	2830	138	Q	2310	79		75-125	20		20
Selenium, Total	0.720J	9.96	10.2	102		9.59	100		75-125	6		20
Silver, Total	0.256J	24.9	27.0	108		25.8	107		75-125	5		20
Sodium, Total	270	830	1090	99		1070	100		75-125	2		20
Thallium, Total	ND	9.96	6.96	70	Q	6.64	69	Q	75-125	5		20
Vanadium, Total	21.5	41.5	64.1	103		55.1	84		75-125	15		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1194873-3 WG1194873-4 QC Sample: L1900324-02 Client ID: RB21_2-4									
Zinc, Total	212	41.5	263	123	236	60	Q 75-125	11	20
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1195001-3 WG1195001-4 QC Sample: L1900324-02 Client ID: RB21_2-4									
Mercury, Total	0.520	0.133	0.663	108	0.688	127	Q 80-120	4	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-01

Date Collected: 01/03/19 11:30

Client ID: RB21_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.3		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	0.97	J	mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:37	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.867	0.173	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-02

Date Collected: 01/03/19 11:35

Client ID: RB21_2-4

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.7		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:38	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.845	0.169	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-03

Date Collected: 01/03/19 11:40

Client ID: RB21_18-20

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.2		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.832	0.166	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-04

Date Collected: 01/03/19 13:00

Client ID: RB22_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.0		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:42	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.889	0.178	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-05

Date Collected: 01/03/19 13:05

Client ID: RB22_3-5

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.7		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:43	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.892	0.178	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-06

Date Collected: 01/03/19 14:00

Client ID: RB19_0-2

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.7		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	0.24	J	mg/kg	1.0	0.22	1	01/04/19 11:15	01/04/19 13:44	1,9010C/9012B	LH
Chromium, Hexavalent	0.293	J	mg/kg	0.902	0.180	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-07

Date Collected: 01/03/19 14:05

Client ID: RB19_20-22

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	57.4		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.6	0.35	1	01/04/19 11:15	01/04/19 13:45	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.39	0.279	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

SAMPLE RESULTS

Lab ID: L1900324-08

Date Collected: 01/03/19 14:10

Client ID: RB19_24-25

Date Received: 01/03/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	66.2		%	0.100	NA	1	-	01/04/19 15:45	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.4	0.30	1	01/04/19 11:15	01/04/19 14:10	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.21	0.242	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG1194787-1									
Cyanide, Total	ND	mg/kg	0.99	0.21	1	01/04/19 11:15	01/04/19 13:20	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-08 Batch: WG1194953-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	01/04/19 17:15	01/04/19 23:00	1,7196A	AJ

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG1194787-2 WG1194787-3								
Cyanide, Total	48	Q	46	Q	80-120	3		35
General Chemistry - Westborough Lab Associated sample(s): 01-08 Batch: WG1194953-2								
Chromium, Hexavalent	99		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194787-4 WG1194787-5 QC Sample: L1900324-02 Client ID: RB21_2-4												
Cyanide, Total	ND	10	10	96		9.3	95		75-125	7		35
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194953-4 WG1194953-5 QC Sample: L1900324-02 Client ID: RB21_2-4												
Chromium, Hexavalent	ND	901	960	107		1030	98		75-125	7		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900324

Report Date: 01/10/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194871-1 QC Sample: L1900324-02 Client ID: RB21_2-4						
Solids, Total	94.7	94.8	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1194953-7 QC Sample: L1900324-02 Client ID: RB21_2-4						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01101913:48
Lab Number: L1900324
Report Date: 01/10/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-01A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-01B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-01C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-01D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-01F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-01G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-02A1	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-02A2	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-02B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02B1	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02B2	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02C1	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02C2	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-02D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-02D1	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-02D2	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-02E1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-02E2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-02F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02F1	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02F2	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02G1	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-02G2	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-03A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-03B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-03C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-03D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01101913:48
Lab Number: L1900324
Report Date: 01/10/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-03F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-03G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-04A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-04B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-04C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-04D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-04F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-04G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-05A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-05B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-05C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-05D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-05F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900324

Project Number: 170487001

Report Date: 01/10/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-05G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-06A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-06B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-06C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-06D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-06F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-06G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-07A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-07B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-07C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-07D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)
L1900324-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-07F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-07G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-08A	Vial MeOH preserved	A	NA		3.9	Y	Absent		NYTCL-8260HLW(14)
L1900324-08B	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-08C	Vial water preserved	A	NA		3.9	Y	Absent	04-JAN-19 05:48	NYTCL-8260HLW(14)
L1900324-08D	Plastic 2oz unpreserved for TS	A	NA		3.9	Y	Absent		TS(7)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01101913:48
Lab Number: L1900324
Report Date: 01/10/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900324-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900324-08F	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-08G	Glass 500ml/16oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900324-09A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260(14)
L1900324-09B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900324
Report Date: 01/10/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 ALPHA ANALYTICAL Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 1	Date Rec'd in Lab 1/31/19	ALPHA Job # 21906324										
		Project Information Project Name: Gerard Ave + E. 146th St. Project Location: Bronx, NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUiS (1 File) <input checked="" type="checkbox"/> EQUiS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #									
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Project Manager: Julia Leung ALPHAQuote #: 7013 Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:									
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.				ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)									
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hex Chromium	Total Cyanide	Total Bottle	
		Date	Time												
00324-01	RB21-0-2	1/3/19	1130	Soil	JL	X	X	X	X	X	X	X	X		
-02	RB21-2-4	↓	1135	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓		↓
-03	RB21-18-20	↓	1140	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓		↓
-04	RB22-0-2	↓	1300	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓		↓
-05	RB22-3-5	↓	1305	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓		↓
-06	RB19-0-2	↓	1400	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓		↓
-07	RB19-20-22	↓	1405	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓		↓
-08	RB19-24-25	↓	1410	↓	JL	↓	↓	↓	↓	↓	↓	↓	↓		↓
-09	SOTB65-010319	-	-	AQ	JL	X									
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)					
		Relinquished By:		Date/Time		Received By:		Date/Time							
		[Signature]		1/31/19 14:47		[Signature]		1/31/19 14:47							
		[Signature]		1/31/19 16:15		[Signature]		1/31/19 1900							
		[Signature]		1/31/19 2230		[Signature]		1/31/19 2230							



ANALYTICAL REPORT

Lab Number:	L1900707
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/14/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900707-01	RB13_0-2	SOIL	BRONX, NY	01/07/19 10:45	01/07/19
L1900707-02	RB13_18-20	SOIL	BRONX, NY	01/07/19 11:00	01/07/19
L1900707-03	RB13_22-24	SOIL	BRONX, NY	01/07/19 10:50	01/07/19
L1900707-04	RB13_33-35	SOIL	BRONX, NY	01/07/19 10:55	01/07/19
L1900707-05	RB14_0-2	SOIL	BRONX, NY	01/07/19 12:20	01/07/19
L1900707-06	RB14_18-20	SOIL	BRONX, NY	01/07/19 12:25	01/07/19
L1900707-07	RB14_23-25	SOIL	BRONX, NY	01/07/19 12:30	01/07/19
L1900707-08	RB14_33-35	SOIL	BRONX, NY	01/07/19 12:35	01/07/19
L1900707-09	SODUP04_010719	SOIL	BRONX, NY	01/07/19 00:00	01/07/19
L1900707-10	SOTB06_010719	WATER	BRONX, NY	01/07/19 00:00	01/07/19
L1900707-11	SOFB03_010719	WATER	BRONX, NY	01/07/19 14:00	01/07/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1900707-03, -06, -07, and -09: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L1900707-03, -06, -07, and -09: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (146%, 149%, 131%, and 147%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Semivolatile Organics

L1900707-07: The sample has elevated detection limits due to the dilution required by the sample matrix.

The WG1195621-4/-5 MS/MSD recoveries, performed on L1900707-03, are below the acceptance criteria for nitrobenzene (MSD 39%), acetophenone (0%/0%), 2,4-dinitrophenol (0%/0%), 4,6-dinitro-o-cresol (0%/0%), and benzoic acid (0%/0%), due to the concentrations of these compounds falling below the reported detection limits.

The WG1195621-4/-5 MS/MSD recoveries, performed on L1900707-03, are outside the acceptance criteria for naphthalene (0%/0%) and 2-methylnaphthalene (0%/0%). The unacceptable percent recoveries are attributed to the elevated concentrations of target compounds present in the native sample.

Total Metals

L1900707-01 through -09: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1196431-3/-4 MS/MSD recoveries for aluminum (420%/1450%) and iron (559%/2840%), performed on L1900707-03, do not apply because the sample concentrations are greater than four times the spike amounts added. The MS/MSD RPDs for aluminum (39%) and iron (25%) are above the acceptance criteria.

The WG1196431-4 MSD recoveries, performed on L1900707-03, are outside the acceptance criteria for

Project Name: GERARD AVE. + E. 146TH ST.
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Case Narrative (continued)

magnesium (163%), manganese (151%), and potassium (126%). A post digestion spike was performed and was within acceptance criteria.

Cyanide, Total

The WG1195617-2/-3 LCS/LCSD recoveries (60%/62%), associated with L1900707-01 through -09, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Hexavalent Chromium

The WG1196593-6 Soluble MS recovery (73%) was below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 99%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/14/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 14:36
 Analyst: AD
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.14	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	0.77		ug/kg	0.58	0.23	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.19	1
Bromodichloromethane	ND		ug/kg	0.58	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	0.76		ug/kg	0.58	0.19	1
Toluene	0.80	J	ug/kg	1.2	0.63	1
Ethylbenzene	0.18	J	ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-01

Date Collected: 01/07/19 10:45

Client ID: RB13_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	0.88	J	ug/kg	2.3	0.65	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	0.88	J	ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	7.4	J	ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.3	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.19	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.6	0.75	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
Client ID: RB13_0-2
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.32	1
1,3,5-Trimethylbenzene	0.26	J	ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.39	1
1,4-Dioxane	ND		ug/kg	120	41.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	0.66	J	ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02 D
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 18:06
 Analyst: AD
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	2800	1300	10
1,1-Dichloroethane	ND		ug/kg	560	81.	10
Chloroform	ND		ug/kg	840	78.	10
Carbon tetrachloride	ND		ug/kg	560	130	10
1,2-Dichloropropane	ND		ug/kg	560	70.	10
Dibromochloromethane	ND		ug/kg	560	78.	10
1,1,2-Trichloroethane	ND		ug/kg	560	150	10
Tetrachloroethene	ND		ug/kg	280	110	10
Chlorobenzene	ND		ug/kg	280	71.	10
Trichlorofluoromethane	ND		ug/kg	2200	390	10
1,2-Dichloroethane	ND		ug/kg	560	140	10
1,1,1-Trichloroethane	ND		ug/kg	280	93.	10
Bromodichloromethane	ND		ug/kg	280	61.	10
trans-1,3-Dichloropropene	ND		ug/kg	560	150	10
cis-1,3-Dichloropropene	ND		ug/kg	280	88.	10
1,3-Dichloropropene, Total	ND		ug/kg	280	88.	10
1,1-Dichloropropene	ND		ug/kg	280	89.	10
Bromoform	ND		ug/kg	2200	140	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	280	93.	10
Benzene	1700		ug/kg	280	93.	10
Toluene	1600		ug/kg	560	300	10
Ethylbenzene	37000		ug/kg	560	79.	10
Chloromethane	ND		ug/kg	2200	520	10
Bromomethane	ND		ug/kg	1100	320	10
Vinyl chloride	ND		ug/kg	560	190	10
Chloroethane	ND		ug/kg	1100	250	10
1,1-Dichloroethene	ND		ug/kg	560	130	10
trans-1,2-Dichloroethene	ND		ug/kg	840	77.	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-02 D

Date Collected: 01/07/19 11:00

Client ID: RB13_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	280	77.	10
1,2-Dichlorobenzene	ND		ug/kg	1100	80.	10
1,3-Dichlorobenzene	ND		ug/kg	1100	83.	10
1,4-Dichlorobenzene	ND		ug/kg	1100	96.	10
Methyl tert butyl ether	ND		ug/kg	1100	110	10
p/m-Xylene	93000		ug/kg	1100	310	10
o-Xylene	24000		ug/kg	560	160	10
Xylenes, Total	120000		ug/kg	560	160	10
cis-1,2-Dichloroethene	ND		ug/kg	560	98.	10
1,2-Dichloroethene, Total	ND		ug/kg	560	77.	10
Dibromomethane	ND		ug/kg	1100	130	10
Styrene	ND		ug/kg	560	110	10
Dichlorodifluoromethane	ND		ug/kg	5600	510	10
Acetone	ND		ug/kg	5600	2700	10
Carbon disulfide	ND		ug/kg	5600	2500	10
2-Butanone	ND		ug/kg	5600	1200	10
Vinyl acetate	ND		ug/kg	5600	1200	10
4-Methyl-2-pentanone	ND		ug/kg	5600	720	10
1,2,3-Trichloropropane	ND		ug/kg	1100	71.	10
2-Hexanone	ND		ug/kg	5600	660	10
Bromochloromethane	ND		ug/kg	1100	110	10
2,2-Dichloropropane	ND		ug/kg	1100	110	10
1,2-Dibromoethane	ND		ug/kg	560	160	10
1,3-Dichloropropane	ND		ug/kg	1100	93.	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	280	74.	10
Bromobenzene	ND		ug/kg	1100	81.	10
n-Butylbenzene	5500		ug/kg	560	93.	10
sec-Butylbenzene	2000		ug/kg	560	82.	10
tert-Butylbenzene	200	J	ug/kg	1100	66.	10
o-Chlorotoluene	ND		ug/kg	1100	110	10
p-Chlorotoluene	ND		ug/kg	1100	60.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1700	560	10
Hexachlorobutadiene	160	J	ug/kg	2200	94.	10
Isopropylbenzene	7100		ug/kg	560	61.	10
p-Isopropyltoluene	2000		ug/kg	560	61.	10
Naphthalene	12000		ug/kg	2200	360	10
Acrylonitrile	ND		ug/kg	2200	640	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02 D
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	18000		ug/kg	560	96.	10
1,2,3-Trichlorobenzene	ND		ug/kg	1100	180	10
1,2,4-Trichlorobenzene	ND		ug/kg	1100	150	10
1,3,5-Trimethylbenzene	38000		ug/kg	1100	110	10
1,2,4-Trimethylbenzene	110000		ug/kg	1100	190	10
1,4-Dioxane	ND		ug/kg	56000	20000	10
p-Diethylbenzene	3200		ug/kg	1100	99.	10
p-Ethyltoluene	75000		ug/kg	1100	210	10
1,2,4,5-Tetramethylbenzene	12000		ug/kg	1100	110	10
Ethyl ether	ND		ug/kg	1100	190	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	2800	790	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	126		70-130
Dibromofluoromethane	84		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03 D
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 16:21
 Analyst: AD
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	1500	690	5
1,1-Dichloroethane	ND		ug/kg	300	44.	5
Chloroform	ND		ug/kg	450	42.	5
Carbon tetrachloride	ND		ug/kg	300	70.	5
1,2-Dichloropropane	ND		ug/kg	300	38.	5
Dibromochloromethane	ND		ug/kg	300	42.	5
1,1,2-Trichloroethane	ND		ug/kg	300	81.	5
Tetrachloroethene	ND		ug/kg	150	59.	5
Chlorobenzene	ND		ug/kg	150	38.	5
Trichlorofluoromethane	ND		ug/kg	1200	210	5
1,2-Dichloroethane	ND		ug/kg	300	78.	5
1,1,1-Trichloroethane	ND		ug/kg	150	50.	5
Bromodichloromethane	ND		ug/kg	150	33.	5
trans-1,3-Dichloropropene	ND		ug/kg	300	82.	5
cis-1,3-Dichloropropene	ND		ug/kg	150	48.	5
1,3-Dichloropropene, Total	ND		ug/kg	150	48.	5
1,1-Dichloropropene	ND		ug/kg	150	48.	5
Bromoform	ND		ug/kg	1200	74.	5
1,1,2,2-Tetrachloroethane	ND		ug/kg	150	50.	5
Benzene	1400		ug/kg	150	50.	5
Toluene	490		ug/kg	300	160	5
Ethylbenzene	9700		ug/kg	300	43.	5
Chloromethane	ND		ug/kg	1200	280	5
Bromomethane	ND		ug/kg	600	180	5
Vinyl chloride	ND		ug/kg	300	100	5
Chloroethane	ND		ug/kg	600	140	5
1,1-Dichloroethene	ND		ug/kg	300	72.	5
trans-1,2-Dichloroethene	ND		ug/kg	450	41.	5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-03 D

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	150	41.	5
1,2-Dichlorobenzene	ND		ug/kg	600	44.	5
1,3-Dichlorobenzene	ND		ug/kg	600	45.	5
1,4-Dichlorobenzene	ND		ug/kg	600	52.	5
Methyl tert butyl ether	ND		ug/kg	600	61.	5
p/m-Xylene	4000		ug/kg	600	170	5
o-Xylene	1200		ug/kg	300	88.	5
Xylenes, Total	5200		ug/kg	300	88.	5
cis-1,2-Dichloroethene	ND		ug/kg	300	53.	5
1,2-Dichloroethene, Total	ND		ug/kg	300	41.	5
Dibromomethane	ND		ug/kg	600	72.	5
Styrene	ND		ug/kg	300	59.	5
Dichlorodifluoromethane	ND		ug/kg	3000	280	5
Acetone	ND		ug/kg	3000	1400	5
Carbon disulfide	ND		ug/kg	3000	1400	5
2-Butanone	ND		ug/kg	3000	670	5
Vinyl acetate	ND		ug/kg	3000	650	5
4-Methyl-2-pentanone	ND		ug/kg	3000	390	5
1,2,3-Trichloropropane	ND		ug/kg	600	38.	5
2-Hexanone	ND		ug/kg	3000	360	5
Bromochloromethane	ND		ug/kg	600	62.	5
2,2-Dichloropropane	ND		ug/kg	600	61.	5
1,2-Dibromoethane	ND		ug/kg	300	84.	5
1,3-Dichloropropane	ND		ug/kg	600	50.	5
1,1,1,2-Tetrachloroethane	ND		ug/kg	150	40.	5
Bromobenzene	ND		ug/kg	600	44.	5
n-Butylbenzene	11000		ug/kg	300	50.	5
sec-Butylbenzene	2900		ug/kg	300	44.	5
tert-Butylbenzene	280	J	ug/kg	600	36.	5
o-Chlorotoluene	ND		ug/kg	600	58.	5
p-Chlorotoluene	ND		ug/kg	600	33.	5
1,2-Dibromo-3-chloropropane	ND		ug/kg	910	300	5
Hexachlorobutadiene	ND		ug/kg	1200	51.	5
Isopropylbenzene	12000		ug/kg	300	33.	5
p-Isopropyltoluene	2300		ug/kg	300	33.	5
Naphthalene	25000		ug/kg	1200	200	5
Acrylonitrile	ND		ug/kg	1200	350	5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-03 D

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	30000		ug/kg	300	52.	5
1,2,3-Trichlorobenzene	ND		ug/kg	600	97.	5
1,2,4-Trichlorobenzene	ND		ug/kg	600	82.	5
1,3,5-Trimethylbenzene	6700		ug/kg	600	58.	5
1,2,4-Trimethylbenzene	300	J	ug/kg	600	100	5
1,4-Dioxane	ND		ug/kg	30000	11000	5
p-Diethylbenzene	5800		ug/kg	600	53.	5
p-Ethyltoluene	6400		ug/kg	600	120	5
1,2,4,5-Tetramethylbenzene	20000		ug/kg	600	58.	5
Ethyl ether	ND		ug/kg	600	100	5
trans-1,4-Dichloro-2-butene	ND		ug/kg	1500	430	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	146	Q	70-130
Dibromofluoromethane	77		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 15:03
 Analyst: AD
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.0	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.24	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.84	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.60	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	0.21	J	ug/kg	0.60	0.20	1
Toluene	ND		ug/kg	1.2	0.66	1
Ethylbenzene	0.97	J	ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.70	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.54	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-04

Date Collected: 01/07/19 10:55

Client ID: RB13_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.68	1
o-Xylene	ND		ug/kg	1.2	0.35	1
Xylenes, Total	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.8	1
Carbon disulfide	ND		ug/kg	12	5.5	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.60	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	0.55	J	ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	0.56	J	ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	1.2	J	ug/kg	4.8	0.78	1
Acrylonitrile	ND		ug/kg	4.8	1.4	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
Client ID: RB13_33-35
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	1.1	J	ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	0.70	J	ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.40	1
1,4-Dioxane	ND		ug/kg	120	42.	1
p-Diethylbenzene	1.6	J	ug/kg	2.4	0.21	1
p-Ethyltoluene	0.54	J	ug/kg	2.4	0.46	1
1,2,4,5-Tetramethylbenzene	0.86	J	ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.41	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	78		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 15:29
 Analyst: AD
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.9	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	0.62		ug/kg	0.59	0.23	1
Chlorobenzene	ND		ug/kg	0.59	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.82	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.59	0.20	1
Bromodichloromethane	ND		ug/kg	0.59	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.59	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.59	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.59	0.19	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.59	0.20	1
Benzene	0.59		ug/kg	0.59	0.20	1
Toluene	0.82	J	ug/kg	1.2	0.64	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.4	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-05

Date Collected: 01/07/19 12:20

Client ID: RB14_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.59	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.66	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.7	1
Carbon disulfide	ND		ug/kg	12	5.4	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.59	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.22	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.7	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.7	0.77	1
Acrylonitrile	ND		ug/kg	4.7	1.4	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
Client ID: RB14_0-2
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.39	1
1,4-Dioxane	ND		ug/kg	120	41.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.45	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.22	1
Ethyl ether	ND		ug/kg	2.4	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	90		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06 D
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 13:18
 Analyst: AD
 Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	750	340	2.5
1,1-Dichloroethane	ND		ug/kg	150	22.	2.5
Chloroform	ND		ug/kg	220	21.	2.5
Carbon tetrachloride	ND		ug/kg	150	34.	2.5
1,2-Dichloropropane	ND		ug/kg	150	19.	2.5
Dibromochloromethane	ND		ug/kg	150	21.	2.5
1,1,2-Trichloroethane	ND		ug/kg	150	40.	2.5
Tetrachloroethene	ND		ug/kg	75	29.	2.5
Chlorobenzene	ND		ug/kg	75	19.	2.5
Trichlorofluoromethane	ND		ug/kg	600	100	2.5
1,2-Dichloroethane	ND		ug/kg	150	38.	2.5
1,1,1-Trichloroethane	ND		ug/kg	75	25.	2.5
Bromodichloromethane	ND		ug/kg	75	16.	2.5
trans-1,3-Dichloropropene	ND		ug/kg	150	41.	2.5
cis-1,3-Dichloropropene	ND		ug/kg	75	24.	2.5
1,3-Dichloropropene, Total	ND		ug/kg	75	24.	2.5
1,1-Dichloropropene	ND		ug/kg	75	24.	2.5
Bromoform	ND		ug/kg	600	37.	2.5
1,1,2,2-Tetrachloroethane	ND		ug/kg	75	25.	2.5
Benzene	ND		ug/kg	75	25.	2.5
Toluene	ND		ug/kg	150	81.	2.5
Ethylbenzene	320		ug/kg	150	21.	2.5
Chloromethane	ND		ug/kg	600	140	2.5
Bromomethane	ND		ug/kg	300	87.	2.5
Vinyl chloride	ND		ug/kg	150	50.	2.5
Chloroethane	ND		ug/kg	300	68.	2.5
1,1-Dichloroethene	ND		ug/kg	150	36.	2.5
trans-1,2-Dichloroethene	ND		ug/kg	220	20.	2.5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-06 D

Date Collected: 01/07/19 12:25

Client ID: RB14_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	75	20.	2.5
1,2-Dichlorobenzene	ND		ug/kg	300	22.	2.5
1,3-Dichlorobenzene	ND		ug/kg	300	22.	2.5
1,4-Dichlorobenzene	ND		ug/kg	300	26.	2.5
Methyl tert butyl ether	ND		ug/kg	300	30.	2.5
p/m-Xylene	ND		ug/kg	300	84.	2.5
o-Xylene	ND		ug/kg	150	43.	2.5
Xylenes, Total	ND		ug/kg	150	43.	2.5
cis-1,2-Dichloroethene	ND		ug/kg	150	26.	2.5
1,2-Dichloroethene, Total	ND		ug/kg	150	20.	2.5
Dibromomethane	ND		ug/kg	300	36.	2.5
Styrene	ND		ug/kg	150	29.	2.5
Dichlorodifluoromethane	ND		ug/kg	1500	140	2.5
Acetone	ND		ug/kg	1500	720	2.5
Carbon disulfide	ND		ug/kg	1500	680	2.5
2-Butanone	ND		ug/kg	1500	330	2.5
Vinyl acetate	ND		ug/kg	1500	320	2.5
4-Methyl-2-pentanone	ND		ug/kg	1500	190	2.5
1,2,3-Trichloropropane	ND		ug/kg	300	19.	2.5
2-Hexanone	ND		ug/kg	1500	180	2.5
Bromochloromethane	ND		ug/kg	300	31.	2.5
2,2-Dichloropropane	ND		ug/kg	300	30.	2.5
1,2-Dibromoethane	ND		ug/kg	150	42.	2.5
1,3-Dichloropropane	ND		ug/kg	300	25.	2.5
1,1,1,2-Tetrachloroethane	ND		ug/kg	75	20.	2.5
Bromobenzene	ND		ug/kg	300	22.	2.5
n-Butylbenzene	3200		ug/kg	150	25.	2.5
sec-Butylbenzene	1200		ug/kg	150	22.	2.5
tert-Butylbenzene	110	J	ug/kg	300	18.	2.5
o-Chlorotoluene	ND		ug/kg	300	28.	2.5
p-Chlorotoluene	ND		ug/kg	300	16.	2.5
1,2-Dibromo-3-chloropropane	ND		ug/kg	450	150	2.5
Hexachlorobutadiene	ND		ug/kg	600	25.	2.5
Isopropylbenzene	2400		ug/kg	150	16.	2.5
p-Isopropyltoluene	580		ug/kg	150	16.	2.5
Naphthalene	480	J	ug/kg	600	97.	2.5
Acrylonitrile	ND		ug/kg	600	170	2.5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06 D
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	7600		ug/kg	150	26.	2.5
1,2,3-Trichlorobenzene	ND		ug/kg	300	48.	2.5
1,2,4-Trichlorobenzene	ND		ug/kg	300	41.	2.5
1,3,5-Trimethylbenzene	200	J	ug/kg	300	29.	2.5
1,2,4-Trimethylbenzene	59	J	ug/kg	300	50.	2.5
1,4-Dioxane	ND		ug/kg	15000	5200	2.5
p-Diethylbenzene	2600		ug/kg	300	26.	2.5
p-Ethyltoluene	150	J	ug/kg	300	57.	2.5
1,2,4,5-Tetramethylbenzene	9700		ug/kg	300	28.	2.5
Ethyl ether	ND		ug/kg	300	51.	2.5
trans-1,4-Dichloro-2-butene	ND		ug/kg	750	210	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	149	Q	70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 13:44
 Analyst: AD
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	3100	1400	10
1,1-Dichloroethane	ND		ug/kg	620	90.	10
Chloroform	ND		ug/kg	930	87.	10
Carbon tetrachloride	ND		ug/kg	620	140	10
1,2-Dichloropropane	ND		ug/kg	620	78.	10
Dibromochloromethane	ND		ug/kg	620	87.	10
1,1,2-Trichloroethane	ND		ug/kg	620	160	10
Tetrachloroethene	ND		ug/kg	310	120	10
Chlorobenzene	ND		ug/kg	310	79.	10
Trichlorofluoromethane	ND		ug/kg	2500	430	10
1,2-Dichloroethane	ND		ug/kg	620	160	10
1,1,1-Trichloroethane	ND		ug/kg	310	100	10
Bromodichloromethane	ND		ug/kg	310	68.	10
trans-1,3-Dichloropropene	ND		ug/kg	620	170	10
cis-1,3-Dichloropropene	ND		ug/kg	310	98.	10
1,3-Dichloropropene, Total	ND		ug/kg	310	98.	10
1,1-Dichloropropene	ND		ug/kg	310	99.	10
Bromoform	ND		ug/kg	2500	150	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	310	100	10
Benzene	ND		ug/kg	310	100	10
Toluene	ND		ug/kg	620	340	10
Ethylbenzene	2300		ug/kg	620	88.	10
Chloromethane	ND		ug/kg	2500	580	10
Bromomethane	ND		ug/kg	1200	360	10
Vinyl chloride	ND		ug/kg	620	210	10
Chloroethane	ND		ug/kg	1200	280	10
1,1-Dichloroethene	ND		ug/kg	620	150	10
trans-1,2-Dichloroethene	ND		ug/kg	930	85.	10

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-07 D

Date Collected: 01/07/19 12:30

Client ID: RB14_23-25

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	310	85.	10
1,2-Dichlorobenzene	ND		ug/kg	1200	89.	10
1,3-Dichlorobenzene	ND		ug/kg	1200	92.	10
1,4-Dichlorobenzene	ND		ug/kg	1200	110	10
Methyl tert butyl ether	ND		ug/kg	1200	120	10
p/m-Xylene	420	J	ug/kg	1200	350	10
o-Xylene	ND		ug/kg	620	180	10
Xylenes, Total	420	J	ug/kg	620	180	10
cis-1,2-Dichloroethene	ND		ug/kg	620	110	10
1,2-Dichloroethene, Total	ND		ug/kg	620	85.	10
Dibromomethane	ND		ug/kg	1200	150	10
Styrene	ND		ug/kg	620	120	10
Dichlorodifluoromethane	ND		ug/kg	6200	570	10
Acetone	ND		ug/kg	6200	3000	10
Carbon disulfide	ND		ug/kg	6200	2800	10
2-Butanone	ND		ug/kg	6200	1400	10
Vinyl acetate	ND		ug/kg	6200	1300	10
4-Methyl-2-pentanone	ND		ug/kg	6200	790	10
1,2,3-Trichloropropane	1200		ug/kg	1200	79.	10
2-Hexanone	ND		ug/kg	6200	730	10
Bromochloromethane	ND		ug/kg	1200	130	10
2,2-Dichloropropane	ND		ug/kg	1200	120	10
1,2-Dibromoethane	ND		ug/kg	620	170	10
1,3-Dichloropropane	ND		ug/kg	1200	100	10
1,1,1,2-Tetrachloroethane	ND		ug/kg	310	82.	10
Bromobenzene	ND		ug/kg	1200	90.	10
n-Butylbenzene	17000		ug/kg	620	100	10
sec-Butylbenzene	4000		ug/kg	620	91.	10
tert-Butylbenzene	360	J	ug/kg	1200	73.	10
o-Chlorotoluene	ND		ug/kg	1200	120	10
p-Chlorotoluene	ND		ug/kg	1200	67.	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1900	620	10
Hexachlorobutadiene	ND		ug/kg	2500	100	10
Isopropylbenzene	12000		ug/kg	620	68.	10
p-Isopropyltoluene	2600		ug/kg	620	68.	10
Naphthalene	6300		ug/kg	2500	400	10
Acrylonitrile	ND		ug/kg	2500	710	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatle Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	33000		ug/kg	620	110	10
1,2,3-Trichlorobenzene	ND		ug/kg	1200	200	10
1,2,4-Trichlorobenzene	ND		ug/kg	1200	170	10
1,3,5-Trimethylbenzene	23000		ug/kg	1200	120	10
1,2,4-Trimethylbenzene	520	J	ug/kg	1200	210	10
1,4-Dioxane	ND		ug/kg	62000	22000	10
p-Diethylbenzene	7900		ug/kg	1200	110	10
p-Ethyltoluene	2500		ug/kg	1200	240	10
1,2,4,5-Tetramethylbenzene	27000		ug/kg	1200	120	10
Ethyl ether	ND		ug/kg	1200	210	10
trans-1,4-Dichloro-2-butene	ND		ug/kg	3100	880	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	131	Q	70-130
Dibromofluoromethane	90		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 15:55
 Analyst: AD
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.4	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.89	0.13	1
Chloroform	ND		ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.89	0.20	1
1,2-Dichloropropane	ND		ug/kg	0.89	0.11	1
Dibromochloromethane	ND		ug/kg	0.89	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.89	0.24	1
Tetrachloroethene	ND		ug/kg	0.44	0.17	1
Chlorobenzene	ND		ug/kg	0.44	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.62	1
1,2-Dichloroethane	ND		ug/kg	0.89	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.44	0.15	1
Bromodichloromethane	ND		ug/kg	0.44	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.89	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.44	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.44	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.44	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.44	0.15	1
Benzene	ND		ug/kg	0.44	0.15	1
Toluene	ND		ug/kg	0.89	0.48	1
Ethylbenzene	0.17	J	ug/kg	0.89	0.12	1
Chloromethane	ND		ug/kg	3.6	0.83	1
Bromomethane	ND		ug/kg	1.8	0.52	1
Vinyl chloride	ND		ug/kg	0.89	0.30	1
Chloroethane	ND		ug/kg	1.8	0.40	1
1,1-Dichloroethene	ND		ug/kg	0.89	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-08

Date Collected: 01/07/19 12:35

Client ID: RB14_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.44	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.50	1
o-Xylene	ND		ug/kg	0.89	0.26	1
Xylenes, Total	ND		ug/kg	0.89	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.89	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.89	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.21	1
Styrene	ND		ug/kg	0.89	0.17	1
Dichlorodifluoromethane	ND		ug/kg	8.9	0.82	1
Acetone	11		ug/kg	8.9	4.3	1
Carbon disulfide	ND		ug/kg	8.9	4.0	1
2-Butanone	ND		ug/kg	8.9	2.0	1
Vinyl acetate	ND		ug/kg	8.9	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	8.9	1.1	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.11	1
2-Hexanone	ND		ug/kg	8.9	1.0	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.89	0.25	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.44	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.89	0.15	1
sec-Butylbenzene	ND		ug/kg	0.89	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.10	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.89	1
Hexachlorobutadiene	ND		ug/kg	3.6	0.15	1
Isopropylbenzene	ND		ug/kg	0.89	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.89	0.10	1
Naphthalene	0.74	J	ug/kg	3.6	0.58	1
Acrylonitrile	ND		ug/kg	3.6	1.0	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
Client ID: RB14_33-35
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.89	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1
1,4-Dioxane	ND		ug/kg	89	31.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.34	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.4	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	92		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09 D
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 14:10
 Analyst: AD
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	1200	540	4
1,1-Dichloroethane	ND		ug/kg	240	34.	4
Chloroform	ND		ug/kg	350	33.	4
Carbon tetrachloride	ND		ug/kg	240	54.	4
1,2-Dichloropropane	ND		ug/kg	240	30.	4
Dibromochloromethane	ND		ug/kg	240	33.	4
1,1,2-Trichloroethane	ND		ug/kg	240	63.	4
Tetrachloroethene	ND		ug/kg	120	46.	4
Chlorobenzene	ND		ug/kg	120	30.	4
Trichlorofluoromethane	ND		ug/kg	950	160	4
1,2-Dichloroethane	ND		ug/kg	240	61.	4
1,1,1-Trichloroethane	ND		ug/kg	120	40.	4
Bromodichloromethane	ND		ug/kg	120	26.	4
trans-1,3-Dichloropropene	ND		ug/kg	240	64.	4
cis-1,3-Dichloropropene	ND		ug/kg	120	37.	4
1,3-Dichloropropene, Total	ND		ug/kg	120	37.	4
1,1-Dichloropropene	ND		ug/kg	120	38.	4
Bromoform	ND		ug/kg	950	58.	4
1,1,2,2-Tetrachloroethane	ND		ug/kg	120	39.	4
Benzene	ND		ug/kg	120	39.	4
Toluene	ND		ug/kg	240	130	4
Ethylbenzene	620		ug/kg	240	33.	4
Chloromethane	ND		ug/kg	950	220	4
Bromomethane	ND		ug/kg	470	140	4
Vinyl chloride	ND		ug/kg	240	79.	4
Chloroethane	ND		ug/kg	470	110	4
1,1-Dichloroethene	ND		ug/kg	240	56.	4
trans-1,2-Dichloroethene	ND		ug/kg	350	32.	4

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-09 D

Date Collected: 01/07/19 00:00

Client ID: SODUP04_010719

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	120	32.	4
1,2-Dichlorobenzene	ND		ug/kg	470	34.	4
1,3-Dichlorobenzene	ND		ug/kg	470	35.	4
1,4-Dichlorobenzene	ND		ug/kg	470	40.	4
Methyl tert butyl ether	ND		ug/kg	470	48.	4
p/m-Xylene	ND		ug/kg	470	130	4
o-Xylene	ND		ug/kg	240	69.	4
Xylenes, Total	ND		ug/kg	240	69.	4
cis-1,2-Dichloroethene	ND		ug/kg	240	41.	4
1,2-Dichloroethene, Total	ND		ug/kg	240	32.	4
Dibromomethane	ND		ug/kg	470	56.	4
Styrene	ND		ug/kg	240	46.	4
Dichlorodifluoromethane	ND		ug/kg	2400	220	4
Acetone	ND		ug/kg	2400	1100	4
Carbon disulfide	ND		ug/kg	2400	1100	4
2-Butanone	ND		ug/kg	2400	520	4
Vinyl acetate	ND		ug/kg	2400	510	4
4-Methyl-2-pentanone	ND		ug/kg	2400	300	4
1,2,3-Trichloropropane	ND		ug/kg	470	30.	4
2-Hexanone	ND		ug/kg	2400	280	4
Bromochloromethane	ND		ug/kg	470	48.	4
2,2-Dichloropropane	ND		ug/kg	470	48.	4
1,2-Dibromoethane	ND		ug/kg	240	66.	4
1,3-Dichloropropane	ND		ug/kg	470	40.	4
1,1,1,2-Tetrachloroethane	ND		ug/kg	120	31.	4
Bromobenzene	ND		ug/kg	470	34.	4
n-Butylbenzene	6100		ug/kg	240	40.	4
sec-Butylbenzene	1700		ug/kg	240	34.	4
tert-Butylbenzene	150	J	ug/kg	470	28.	4
o-Chlorotoluene	ND		ug/kg	470	45.	4
p-Chlorotoluene	ND		ug/kg	470	26.	4
1,2-Dibromo-3-chloropropane	ND		ug/kg	710	240	4
Hexachlorobutadiene	ND		ug/kg	950	40.	4
Isopropylbenzene	4600		ug/kg	240	26.	4
p-Isopropyltoluene	1100		ug/kg	240	26.	4
Naphthalene	1800		ug/kg	950	150	4
Acrylonitrile	ND		ug/kg	950	270	4

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09 D
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	13000		ug/kg	240	40.	4
1,2,3-Trichlorobenzene	ND		ug/kg	470	76.	4
1,2,4-Trichlorobenzene	ND		ug/kg	470	64.	4
1,3,5-Trimethylbenzene	4800		ug/kg	470	46.	4
1,2,4-Trimethylbenzene	ND		ug/kg	470	79.	4
1,4-Dioxane	ND		ug/kg	24000	8300	4
p-Diethylbenzene	3300		ug/kg	470	42.	4
p-Ethyltoluene	570		ug/kg	470	91.	4
1,2,4,5-Tetramethylbenzene	12000		ug/kg	470	45.	4
Ethyl ether	ND		ug/kg	470	81.	4
trans-1,4-Dichloro-2-butene	ND		ug/kg	1200	340	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	147	Q	70-130
Dibromofluoromethane	87		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-10
 Client ID: SOTB06_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/08/19 15:00
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-10
 Client ID: SOTB06_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-10
 Client ID: SOTB06_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/08/19 15:29
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
Client ID: SOFB03_010719
Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
Client ID: SOFB03_010719
Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/08/19 08:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1195753-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/08/19 08:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1195753-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/08/19 08:40
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 10-11 Batch: WG1195753-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/19 08:30
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,04-05,08 Batch: WG1196396-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.91	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/10/19 08:30
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,04-05,08 Batch: WG1196396-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/10/19 08:30
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,04-05,08 Batch: WG1196396-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	94		70-130



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/10/19 08:30
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02-03,06-07,09 Batch: WG1196507-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	46	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/19 08:30
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02-03,06-07,09 Batch: WG1196507-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/10/19 08:30
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02-03,06-07,09 Batch: WG1196507-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	94		70-130



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1195753-3 WG1195753-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	86		84		63-132	2		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	100		110		63-130	10		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	90		90		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	80		78		62-150	3		20
1,2-Dichloroethane	110		100		70-130	10		20
1,1,1-Trichloroethane	93		91		67-130	2		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	92		91		70-130	1		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	87		85		64-130	2		20
Bromomethane	54		53		39-139	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1195753-3 WG1195753-4								
Vinyl chloride	87		86		55-140	1		20
Chloroethane	96		94		55-138	2		20
1,1-Dichloroethene	90		87		61-145	3		20
trans-1,2-Dichloroethene	98		97		70-130	1		20
Trichloroethene	97		97		70-130	0		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	110		110		64-130	0		20
Acrylonitrile	100		100		70-130	0		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	72		69		36-147	4		20
Acetone	120		120		58-148	0		20
Carbon disulfide	91		89		51-130	2		20
2-Butanone	85		74		63-138	14		20
Vinyl acetate	120		120		70-130	0		20
4-Methyl-2-pentanone	100		100		59-130	0		20
2-Hexanone	100		100		57-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1195753-3 WG1195753-4								
Bromochloromethane	110		100		70-130	10		20
2,2-Dichloropropane	98		96		63-133	2		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	110		100		70-130	10		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	100		96		53-136	4		20
sec-Butylbenzene	97		95		70-130	2		20
tert-Butylbenzene	100		98		70-130	2		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	87		84		41-144	4		20
Hexachlorobutadiene	96		90		63-130	6		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		99		70-130	1		20
Naphthalene	80		80		70-130	0		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	78		79		70-130	1		20
1,2,4-Trichlorobenzene	90		89		70-130	1		20
1,3,5-Trimethylbenzene	110		100		64-130	10		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
1,4-Dioxane	100		86		56-162	15		20
p-Diethylbenzene	100		98		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 10-11 Batch: WG1195753-3 WG1195753-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	110		100		59-134	10		20
trans-1,4-Dichloro-2-butene	92		94		70-130	2		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	101		101		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	105		104		70-130
Dibromofluoromethane	96		96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,04-05,08 Batch: WG1196396-3 WG1196396-4								
Methylene chloride	94		100		70-130	6		30
1,1-Dichloroethane	98		110		70-130	12		30
Chloroform	98		97		70-130	1		30
Carbon tetrachloride	89		94		70-130	5		30
1,2-Dichloropropane	95		114		70-130	18		30
Dibromochloromethane	97		105		70-130	8		30
1,1,2-Trichloroethane	104		109		70-130	5		30
Tetrachloroethene	95		105		70-130	10		30
Chlorobenzene	102		107		70-130	5		30
Trichlorofluoromethane	89		95		70-139	7		30
1,2-Dichloroethane	78		78		70-130	0		30
1,1,1-Trichloroethane	90		92		70-130	2		30
Bromodichloromethane	88		104		70-130	17		30
trans-1,3-Dichloropropene	96		102		70-130	6		30
cis-1,3-Dichloropropene	94		106		70-130	12		30
1,1-Dichloropropene	96		100		70-130	4		30
Bromoform	101		103		70-130	2		30
1,1,2,2-Tetrachloroethane	115		108		70-130	6		30
Benzene	98		105		70-130	7		30
Toluene	100		107		70-130	7		30
Ethylbenzene	100		106		70-130	6		30
Chloromethane	104		107		52-130	3		30
Bromomethane	119		122		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,04-05,08 Batch: WG1196396-3 WG1196396-4									
Vinyl chloride	109		118		67-130		8		30
Chloroethane	111		114		50-151		3		30
1,1-Dichloroethene	100		107		65-135		7		30
trans-1,2-Dichloroethene	100		106		70-130		6		30
Trichloroethene	95		100		70-130		5		30
1,2-Dichlorobenzene	102		108		70-130		6		30
1,3-Dichlorobenzene	105		108		70-130		3		30
1,4-Dichlorobenzene	101		108		70-130		7		30
Methyl tert butyl ether	92		94		66-130		2		30
p/m-Xylene	104		106		70-130		2		30
o-Xylene	105		104		70-130		1		30
cis-1,2-Dichloroethene	105		108		70-130		3		30
Dibromomethane	90		102		70-130		13		30
Styrene	106		105		70-130		1		30
Dichlorodifluoromethane	89		97		30-146		9		30
Acetone	94		96		54-140		2		30
Carbon disulfide	96		102		59-130		6		30
2-Butanone	107		96		70-130		11		30
Vinyl acetate	96		108		70-130		12		30
4-Methyl-2-pentanone	98		101		70-130		3		30
1,2,3-Trichloropropane	103		103		68-130		0		30
2-Hexanone	95		96		70-130		1		30
Bromochloromethane	106		106		70-130		0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,04-05,08 Batch: WG1196396-3 WG1196396-4								
2,2-Dichloropropane	99		99		70-130	0		30
1,2-Dibromoethane	105		109		70-130	4		30
1,3-Dichloropropane	100		111		69-130	10		30
1,1,1,2-Tetrachloroethane	97		102		70-130	5		30
Bromobenzene	105		110		70-130	5		30
n-Butylbenzene	104		108		70-130	4		30
sec-Butylbenzene	106		112		70-130	6		30
tert-Butylbenzene	106		112		70-130	6		30
o-Chlorotoluene	102		105		70-130	3		30
p-Chlorotoluene	103		106		70-130	3		30
1,2-Dibromo-3-chloropropane	97		104		68-130	7		30
Hexachlorobutadiene	95		105		67-130	10		30
Isopropylbenzene	109		113		70-130	4		30
p-Isopropyltoluene	105		111		70-130	6		30
Naphthalene	104		110		70-130	6		30
Acrylonitrile	101		109		70-130	8		30
n-Propylbenzene	104		110		70-130	6		30
1,2,3-Trichlorobenzene	101		110		70-130	9		30
1,2,4-Trichlorobenzene	104		109		70-130	5		30
1,3,5-Trimethylbenzene	104		110		70-130	6		30
1,2,4-Trimethylbenzene	106		110		70-130	4		30
1,4-Dioxane	86		93		65-136	8		30
p-Diethylbenzene	108		113		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,04-05,08 Batch: WG1196396-3 WG1196396-4								
p-Ethyltoluene	109		112		70-130	3		30
1,2,4,5-Tetramethylbenzene	103		108		70-130	5		30
Ethyl ether	103		102		67-130	1		30
trans-1,4-Dichloro-2-butene	98		93		70-130	5		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	78		79		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	103		102		70-130
Dibromofluoromethane	95		94		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 Batch: WG1196507-3 WG1196507-4								
Methylene chloride	94		100		70-130	6		30
1,1-Dichloroethane	98		110		70-130	12		30
Chloroform	98		97		70-130	1		30
Carbon tetrachloride	89		94		70-130	5		30
1,2-Dichloropropane	95		114		70-130	18		30
Dibromochloromethane	97		105		70-130	8		30
1,1,2-Trichloroethane	104		109		70-130	5		30
Tetrachloroethene	95		105		70-130	10		30
Chlorobenzene	102		107		70-130	5		30
Trichlorofluoromethane	89		95		70-139	7		30
1,2-Dichloroethane	78		78		70-130	0		30
1,1,1-Trichloroethane	90		92		70-130	2		30
Bromodichloromethane	88		104		70-130	17		30
trans-1,3-Dichloropropene	96		102		70-130	6		30
cis-1,3-Dichloropropene	94		106		70-130	12		30
1,1-Dichloropropene	96		100		70-130	4		30
Bromoform	101		103		70-130	2		30
1,1,2,2-Tetrachloroethane	115		108		70-130	6		30
Benzene	98		105		70-130	7		30
Toluene	100		107		70-130	7		30
Ethylbenzene	100		106		70-130	6		30
Chloromethane	104		107		52-130	3		30
Bromomethane	119		122		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 Batch: WG1196507-3 WG1196507-4									
Vinyl chloride	109		118		67-130		8		30
Chloroethane	111		114		50-151		3		30
1,1-Dichloroethene	100		107		65-135		7		30
trans-1,2-Dichloroethene	100		106		70-130		6		30
Trichloroethene	95		100		70-130		5		30
1,2-Dichlorobenzene	102		108		70-130		6		30
1,3-Dichlorobenzene	105		108		70-130		3		30
1,4-Dichlorobenzene	101		108		70-130		7		30
Methyl tert butyl ether	92		94		66-130		2		30
p/m-Xylene	104		106		70-130		2		30
o-Xylene	105		104		70-130		1		30
cis-1,2-Dichloroethene	105		108		70-130		3		30
Dibromomethane	90		102		70-130		13		30
Styrene	106		105		70-130		1		30
Dichlorodifluoromethane	89		97		30-146		9		30
Acetone	94		96		54-140		2		30
Carbon disulfide	96		102		59-130		6		30
2-Butanone	107		96		70-130		11		30
Vinyl acetate	96		108		70-130		12		30
4-Methyl-2-pentanone	98		101		70-130		3		30
1,2,3-Trichloropropane	103		103		68-130		0		30
2-Hexanone	95		96		70-130		1		30
Bromochloromethane	106		106		70-130		0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 Batch: WG1196507-3 WG1196507-4								
2,2-Dichloropropane	99		99		70-130	0		30
1,2-Dibromoethane	105		109		70-130	4		30
1,3-Dichloropropane	100		111		69-130	10		30
1,1,1,2-Tetrachloroethane	97		102		70-130	5		30
Bromobenzene	105		110		70-130	5		30
n-Butylbenzene	104		108		70-130	4		30
sec-Butylbenzene	106		112		70-130	6		30
tert-Butylbenzene	106		112		70-130	6		30
o-Chlorotoluene	102		105		70-130	3		30
p-Chlorotoluene	103		106		70-130	3		30
1,2-Dibromo-3-chloropropane	97		104		68-130	7		30
Hexachlorobutadiene	95		105		67-130	10		30
Isopropylbenzene	109		113		70-130	4		30
p-Isopropyltoluene	105		111		70-130	6		30
Naphthalene	104		110		70-130	6		30
Acrylonitrile	101		109		70-130	8		30
n-Propylbenzene	104		110		70-130	6		30
1,2,3-Trichlorobenzene	101		110		70-130	9		30
1,2,4-Trichlorobenzene	104		109		70-130	5		30
1,3,5-Trimethylbenzene	104		110		70-130	6		30
1,2,4-Trimethylbenzene	106		110		70-130	4		30
1,4-Dioxane	86		93		65-136	8		30
p-Diethylbenzene	108		113		70-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 Batch: WG1196507-3 WG1196507-4								
p-Ethyltoluene	109		112		70-130	3		30
1,2,4,5-Tetramethylbenzene	103		108		70-130	5		30
Ethyl ether	103		102		67-130	1		30
trans-1,4-Dichloro-2-butene	98		93		70-130	5		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	78		79		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	103		102		70-130
Dibromofluoromethane	95		94		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 QC Batch ID: WG1196507-6 WG1196507-7 QC Sample: L1900707-03 Client ID: RB13_22-24												
Methylene chloride	ND	30000	27000	88		27000	91		70-130	3		30
1,1-Dichloroethane	ND	30000	28000	93		28000	94		70-130	1		30
Chloroform	ND	30000	25000	84		26000	86		70-130	2		30
Carbon tetrachloride	ND	30000	24000	79		24000	79		70-130	1		30
1,2-Dichloropropane	ND	30000	29000	96		30000	100		70-130	4		30
Dibromochloromethane	ND	30000	30000	100		30000	100		70-130	0		30
1,1,2-Trichloroethane	ND	30000	100000E	347	Q	88000	294	Q	70-130	16		30
Tetrachloroethene	ND	30000	26000	85		24000	80		70-130	7		30
Chlorobenzene	ND	30000	27000	91		26000	86		70-130	6		30
Trichlorofluoromethane	ND	30000	25000	83		25000	84		70-139	1		30
1,2-Dichloroethane	ND	30000	24000	79		24000	79		70-130	0		30
1,1,1-Trichloroethane	ND	30000	25000	82		25000	82		70-130	0		30
Bromodichloromethane	ND	30000	26000	86		26000	87		70-130	2		30
trans-1,3-Dichloropropene	ND	30000	31000	103		31000	102		70-130	1		30
cis-1,3-Dichloropropene	ND	30000	27000	91		27000	91		70-130	1		30
1,1-Dichloropropene	ND	30000	26000	88		26000	86		70-130	2		30
Bromoform	ND	30000	31000	104		31000	102		70-130	2		30
1,1,2,2-Tetrachloroethane	ND	30000	37000	124		35000	118		70-130	6		30
Benzene	1400	30000	28000	90		28000	89		70-130	1		30
Toluene	490	30000	29000	96		28000	92		70-130	4		30
Ethylbenzene	9700	30000	35000	83		31000	71		70-130	11		30
Chloromethane	ND	30000	32000	108		34000	112		52-130	4		30
Bromomethane	ND	30000	33000	109		35000	116		57-147	6		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 QC Batch ID: WG1196507-6 WG1196507-7 QC Sample: L1900707-03 Client ID: RB13_22-24												
Vinyl chloride	ND	30000	33000	110		34000	113		67-130	3		30
Chloroethane	ND	30000	24000	81		33000	110		50-151	30		30
1,1-Dichloroethene	ND	30000	28000	95		29000	95		65-135	1		30
trans-1,2-Dichloroethene	ND	30000	28000	92		28000	92		70-130	0		30
Trichloroethene	ND	30000	26000	86		25000	83		70-130	4		30
1,2-Dichlorobenzene	ND	30000	25000	83		23000	77		70-130	7		30
1,3-Dichlorobenzene	ND	30000	24000	79		21000	71		70-130	10		30
1,4-Dichlorobenzene	ND	30000	23000	76		21000	68	Q	70-130	11		30
Methyl tert butyl ether	ND	30000	28000	92		28000	95		66-130	2		30
p/m-Xylene	4000	60000	54000	84		49000	75		70-130	10		30
o-Xylene	1200	60000	53000	86		49000	80		70-130	6		30
cis-1,2-Dichloroethene	ND	30000	27000	91		28000	92		70-130	1		30
Dibromomethane	ND	30000	27000	89		27000	89		70-130	0		30
Styrene	ND	60000	54000	91		52000	86		70-130	5		30
Dichlorodifluoromethane	ND	30000	28000	95		29000	96		30-146	2		30
Acetone	ND	30000	27000	90		27000	90		54-140	0		30
Carbon disulfide	ND	30000	27000	91		27000	90		59-130	1		30
2-Butanone	ND	30000	76000	253	Q	40000	133	Q	70-130	62	Q	30
Vinyl acetate	ND	30000	31000	103		32000	105		70-130	3		30
4-Methyl-2-pentanone	ND	30000	41000	137	Q	40000	132	Q	70-130	4		30
1,2,3-Trichloropropane	ND	30000	33000	111		32000	108		68-130	3		30
2-Hexanone	ND	30000	36000	121		37000	122		70-130	1		30
Bromochloromethane	ND	30000	26000	88		27000	90		70-130	2		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-03,06-07,09 QC Batch ID: WG1196507-6 WG1196507-7 QC Sample: L1900707-03 Client ID: RB13_22-24												
2,2-Dichloropropane	ND	30000	26000	87		26000	87		70-130	0		30
1,2-Dibromoethane	ND	30000	33000	109		32000	108		70-130	1		30
1,3-Dichloropropane	ND	30000	32000	107		32000	107		69-130	0		30
1,1,1,2-Tetrachloroethane	ND	30000	29000	95		28000	94		70-130	2		30
Bromobenzene	ND	30000	27000	91		25000	85		70-130	7		30
n-Butylbenzene	11000	30000	28000	55	Q	22000	37	Q	70-130	22		30
sec-Butylbenzene	2900	30000	25000	74		21000	62	Q	70-130	16		30
tert-Butylbenzene	280J	30000	24000	80		21000	71		70-130	12		30
o-Chlorotoluene	ND	30000	25000	84		23000	76		70-130	11		30
p-Chlorotoluene	ND	30000	24000	80		22000	72		70-130	11		30
1,2-Dibromo-3-chloropropane	ND	30000	30000	101		30000	101		68-130	0		30
Hexachlorobutadiene	ND	30000	19000	62	Q	17000	56	Q	67-130	10		30
Isopropylbenzene	12000	30000	36000	79		31000	62	Q	70-130	15		30
p-Isopropyltoluene	2300	30000	24000	73		20000	60	Q	70-130	17		30
Naphthalene	25000	30000	56000	104		52000	88		70-130	9		30
Acrylonitrile	ND	30000	45000	148	Q	41000	137	Q	70-130	8		30
n-Propylbenzene	30000	30000	47000	55	Q	37000	24	Q	70-130	22		30
1,2,3-Trichlorobenzene	ND	30000	25000	83		23000	76		70-130	8		30
1,2,4-Trichlorobenzene	ND	30000	23000	78		22000	72		70-130	8		30
1,3,5-Trimethylbenzene	6700	30000	29000	74		25000	61	Q	70-130	14		30
1,2,4-Trimethylbenzene	300J	30000	24000	80		22000	72		70-130	11		30
1,4-Dioxane	ND	1500000	1400000	90		1300000	89		65-136	1		30
p-Diethylbenzene	5800	30000	27000	69	Q	22000	53	Q	70-130	20		30

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab 03 Client ID: RB13_22-24 Associated sample(s): 02-03,06-07,09 QC Batch ID: WG1196507-6 WG1196507-7 QC Sample: L1900707-												
p-Ethyltoluene	6400	30000	28000	72		24000	58	Q	70-130	16		30
1,2,4,5-Tetramethylbenzene	20000	30000	38000	58	Q	32000	39	Q	70-130	16		30
Ethyl ether	ND	30000	29000	97		30000	99		67-130	2		30
trans-1,4-Dichloro-2-butene	ND	30000	29000	98		29000	95		70-130	3		30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		88		70-130
4-Bromofluorobenzene	145	Q	134	Q	70-130
Dibromofluoromethane	80		81		70-130
Toluene-d8	112		111		70-130



SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 02:10
 Analyst: SZ
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	300		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	160	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-01

Date Collected: 01/07/19 10:45

Client ID: RB13_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	160		ug/kg	120	22.	1
Benzo(a)pyrene	180		ug/kg	150	47.	1
Benzo(b)fluoranthene	320		ug/kg	120	32.	1
Benzo(k)fluoranthene	98	J	ug/kg	120	31.	1
Chrysene	240		ug/kg	120	20.	1
Acenaphthylene	92	J	ug/kg	150	30.	1
Anthracene	61	J	ug/kg	120	37.	1
Benzo(ghi)perylene	240		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	190		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	50	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	200		ug/kg	150	27.	1
Pyrene	340		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	19	J	ug/kg	190	18.	1
2-Methylnaphthalene	92	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	67	J	ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
Client ID: RB13_0-2
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	34	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	53		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 02:35
 Analyst: SZ
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	52	J	ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	34.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	940		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-02

Date Collected: 01/07/19 11:00

Client ID: RB13_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	22	J	ug/kg	190	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	38.	1
3-Nitroaniline	ND		ug/kg	190	37.	1
4-Nitroaniline	ND		ug/kg	190	81.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	550		ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	630	200	1
Benzyl Alcohol	ND		ug/kg	190	60.	1
Carbazole	23	J	ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	56		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03 D
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 19:37
 Analyst: RC
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	790	100	5
1,2,4-Trichlorobenzene	ND		ug/kg	990	110	5
Hexachlorobenzene	ND		ug/kg	590	110	5
Bis(2-chloroethyl)ether	ND		ug/kg	890	130	5
2-Chloronaphthalene	ND		ug/kg	990	98.	5
1,2-Dichlorobenzene	ND		ug/kg	990	180	5
1,3-Dichlorobenzene	ND		ug/kg	990	170	5
1,4-Dichlorobenzene	ND		ug/kg	990	170	5
3,3'-Dichlorobenzidine	ND		ug/kg	990	260	5
2,4-Dinitrotoluene	ND		ug/kg	990	200	5
2,6-Dinitrotoluene	ND		ug/kg	990	170	5
Fluoranthene	280	J	ug/kg	590	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	990	100	5
4-Bromophenyl phenyl ether	ND		ug/kg	990	150	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1200	170	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1100	99.	5
Hexachlorobutadiene	ND		ug/kg	990	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2800	900	5
Hexachloroethane	ND		ug/kg	790	160	5
Isophorone	ND		ug/kg	890	130	5
Naphthalene	22000		ug/kg	990	120	5
Nitrobenzene	ND		ug/kg	890	150	5
NDPA/DPA	ND		ug/kg	790	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	990	150	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	990	340	5
Butyl benzyl phthalate	ND		ug/kg	990	250	5
Di-n-butylphthalate	ND		ug/kg	990	190	5
Di-n-octylphthalate	ND		ug/kg	990	340	5

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03 D

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	990	92.	5
Dimethyl phthalate	ND		ug/kg	990	210	5
Benzo(a)anthracene	160	J	ug/kg	590	110	5
Benzo(a)pyrene	ND		ug/kg	790	240	5
Benzo(b)fluoranthene	ND		ug/kg	590	170	5
Benzo(k)fluoranthene	ND		ug/kg	590	160	5
Chrysene	140	J	ug/kg	590	100	5
Acenaphthylene	ND		ug/kg	790	150	5
Anthracene	ND		ug/kg	590	190	5
Benzo(ghi)perylene	120	J	ug/kg	790	120	5
Fluorene	170	J	ug/kg	990	96.	5
Phenanthrene	320	J	ug/kg	590	120	5
Dibenzo(a,h)anthracene	ND		ug/kg	590	110	5
Indeno(1,2,3-cd)pyrene	ND		ug/kg	790	140	5
Pyrene	330	J	ug/kg	590	98.	5
Biphenyl	460	J	ug/kg	2200	230	5
4-Chloroaniline	ND		ug/kg	990	180	5
2-Nitroaniline	ND		ug/kg	990	190	5
3-Nitroaniline	ND		ug/kg	990	190	5
4-Nitroaniline	ND		ug/kg	990	410	5
Dibenzofuran	ND		ug/kg	990	94.	5
2-Methylnaphthalene	16000		ug/kg	1200	120	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	990	100	5
Acetophenone	ND		ug/kg	990	120	5
2,4,6-Trichlorophenol	ND		ug/kg	590	190	5
p-Chloro-m-cresol	ND		ug/kg	990	150	5
2-Chlorophenol	ND		ug/kg	990	120	5
2,4-Dichlorophenol	ND		ug/kg	890	160	5
2,4-Dimethylphenol	ND		ug/kg	990	330	5
2-Nitrophenol	ND		ug/kg	2100	370	5
4-Nitrophenol	ND		ug/kg	1400	400	5
2,4-Dinitrophenol	ND		ug/kg	4800	460	5
4,6-Dinitro-o-cresol	ND		ug/kg	2600	480	5
Pentachlorophenol	ND		ug/kg	790	220	5
Phenol	ND		ug/kg	990	150	5
2-Methylphenol	ND		ug/kg	990	150	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1400	160	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03 D
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	990	190	5
Benzoic Acid	ND		ug/kg	3200	1000	5
Benzyl Alcohol	ND		ug/kg	990	300	5
Carbazole	ND		ug/kg	990	96.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	239	Q	23-120
2-Fluorobiphenyl	91		30-120
2,4,6-Tribromophenol	101		10-136
4-Terphenyl-d14	84		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 00:02
 Analyst: SZ
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-04

Date Collected: 01/07/19 10:55

Client ID: RB13_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	101		10-136
4-Terphenyl-d14	77		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 00:28
 Analyst: SZ
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	52	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	1100		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	510		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	140	J	ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-05

Date Collected: 01/07/19 12:20

Client ID: RB14_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	500		ug/kg	110	22.	1
Benzo(a)pyrene	650		ug/kg	150	47.	1
Benzo(b)fluoranthene	720		ug/kg	110	32.	1
Benzo(k)fluoranthene	200		ug/kg	110	31.	1
Chrysene	530		ug/kg	110	20.	1
Acenaphthylene	100	J	ug/kg	150	30.	1
Anthracene	280		ug/kg	110	37.	1
Benzo(ghi)perylene	590		ug/kg	150	22.	1
Fluorene	82	J	ug/kg	190	18.	1
Phenanthrene	870		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	92	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	540		ug/kg	150	27.	1
Pyrene	1100		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	57	J	ug/kg	190	18.	1
2-Methylnaphthalene	210	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	390		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	110	J	ug/kg	190	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	57		10-136
4-Terphenyl-d14	52		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/10/19 00:54
 Analyst: SZ
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	49	J	ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	120	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-06

Date Collected: 01/07/19 12:25

Client ID: RB14_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	32.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	150	23.	1
Fluorene	19	J	ug/kg	190	19.	1
Phenanthrene	45	J	ug/kg	120	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	27.	1
Pyrene	44	J	ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	200	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
Client ID: RB14_18-20
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	ND		ug/kg	190	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	57		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/12/19 01:29
 Analyst: EK
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	790	100	5
1,2,4-Trichlorobenzene	ND		ug/kg	980	110	5
Hexachlorobenzene	ND		ug/kg	590	110	5
Bis(2-chloroethyl)ether	ND		ug/kg	880	130	5
2-Chloronaphthalene	ND		ug/kg	980	98.	5
1,2-Dichlorobenzene	ND		ug/kg	980	180	5
1,3-Dichlorobenzene	ND		ug/kg	980	170	5
1,4-Dichlorobenzene	ND		ug/kg	980	170	5
3,3'-Dichlorobenzidine	ND		ug/kg	980	260	5
2,4-Dinitrotoluene	ND		ug/kg	980	200	5
2,6-Dinitrotoluene	ND		ug/kg	980	170	5
Fluoranthene	250	J	ug/kg	590	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	980	100	5
4-Bromophenyl phenyl ether	ND		ug/kg	980	150	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1200	170	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1100	98.	5
Hexachlorobutadiene	ND		ug/kg	980	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2800	890	5
Hexachloroethane	ND		ug/kg	790	160	5
Isophorone	ND		ug/kg	880	130	5
Naphthalene	9400		ug/kg	980	120	5
Nitrobenzene	ND		ug/kg	880	140	5
NDPA/DPA	ND		ug/kg	790	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	980	150	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	980	340	5
Butyl benzyl phthalate	ND		ug/kg	980	250	5
Di-n-butylphthalate	ND		ug/kg	980	190	5
Di-n-octylphthalate	ND		ug/kg	980	330	5

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D

Date Collected: 01/07/19 12:30

Client ID: RB14_23-25

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	980	91.	5
Dimethyl phthalate	ND		ug/kg	980	210	5
Benzo(a)anthracene	120	J	ug/kg	590	110	5
Benzo(a)pyrene	ND		ug/kg	790	240	5
Benzo(b)fluoranthene	ND		ug/kg	590	160	5
Benzo(k)fluoranthene	ND		ug/kg	590	160	5
Chrysene	ND		ug/kg	590	100	5
Acenaphthylene	ND		ug/kg	790	150	5
Anthracene	ND		ug/kg	590	190	5
Benzo(ghi)perylene	ND		ug/kg	790	120	5
Fluorene	ND		ug/kg	980	96.	5
Phenanthrene	140	J	ug/kg	590	120	5
Dibenzo(a,h)anthracene	ND		ug/kg	590	110	5
Indeno(1,2,3-cd)pyrene	ND		ug/kg	790	140	5
Pyrene	240	J	ug/kg	590	98.	5
Biphenyl	ND		ug/kg	2200	230	5
4-Chloroaniline	ND		ug/kg	980	180	5
2-Nitroaniline	ND		ug/kg	980	190	5
3-Nitroaniline	ND		ug/kg	980	180	5
4-Nitroaniline	ND		ug/kg	980	410	5
Dibenzofuran	ND		ug/kg	980	93.	5
2-Methylnaphthalene	12000		ug/kg	1200	120	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	980	100	5
Acetophenone	ND		ug/kg	980	120	5
2,4,6-Trichlorophenol	ND		ug/kg	590	190	5
p-Chloro-m-cresol	ND		ug/kg	980	150	5
2-Chlorophenol	ND		ug/kg	980	120	5
2,4-Dichlorophenol	ND		ug/kg	880	160	5
2,4-Dimethylphenol	ND		ug/kg	980	320	5
2-Nitrophenol	ND		ug/kg	2100	370	5
4-Nitrophenol	ND		ug/kg	1400	400	5
2,4-Dinitrophenol	ND		ug/kg	4700	460	5
4,6-Dinitro-o-cresol	ND		ug/kg	2600	470	5
Pentachlorophenol	ND		ug/kg	790	220	5
Phenol	ND		ug/kg	980	150	5
2-Methylphenol	ND		ug/kg	980	150	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1400	150	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07 D
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	980	190	5
Benzoic Acid	ND		ug/kg	3200	990	5
Benzyl Alcohol	ND		ug/kg	980	300	5
Carbazole	ND		ug/kg	980	96.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	268	Q	23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	66		10-136
4-Terphenyl-d14	67		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 12:26
 Analyst: JG
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-08

Date Collected: 01/07/19 12:35

Client ID: RB14_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	97		10-136
4-Terphenyl-d14	72		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 12:50
 Analyst: JG
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 08:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	140	J	ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	ND		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	180	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	95.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	ND		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	66		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/09/19 19:09
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	55		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	47		10-120
4-Terphenyl-d14	73		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D-SIM
 Analytical Date: 01/09/19 21:03
 Analyst: CB

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	88		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/09/19 21:29
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1195621-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/09/19 21:29
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1195621-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	69.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	160	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/09/19 21:29
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 01/08/19 08:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1195621-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	91		25-120
Phenol-d6	98		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	104		10-136
4-Terphenyl-d14	81		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/09/19 16:51
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1195687-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/09/19 16:51
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1195687-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
 Analytical Date: 01/09/19 16:51
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1195687-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	79		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/09/19 14:57
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG1195689-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	0.02	J	ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01
Chrysene	0.01	J	ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	0.03	J	ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	0.02	J	ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/09/19 14:57
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 11 Batch: WG1195689-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	91		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1195621-2 WG1195621-3								
Acenaphthene	82		71		31-137	14		50
1,2,4-Trichlorobenzene	76		64		38-107	17		50
Hexachlorobenzene	80		67		40-140	18		50
Bis(2-chloroethyl)ether	76		62		40-140	20		50
2-Chloronaphthalene	79		69		40-140	14		50
1,2-Dichlorobenzene	73		61		40-140	18		50
1,3-Dichlorobenzene	73		60		40-140	20		50
1,4-Dichlorobenzene	74		61		28-104	19		50
3,3'-Dichlorobenzidine	46		43		40-140	7		50
2,4-Dinitrotoluene	97		82		40-132	17		50
2,6-Dinitrotoluene	90		84		40-140	7		50
Fluoranthene	77		72		40-140	7		50
4-Chlorophenyl phenyl ether	78		64		40-140	20		50
4-Bromophenyl phenyl ether	80		68		40-140	16		50
Bis(2-chloroisopropyl)ether	76		62		40-140	20		50
Bis(2-chloroethoxy)methane	81		68		40-117	17		50
Hexachlorobutadiene	68		58		40-140	16		50
Hexachlorocyclopentadiene	70		60		40-140	15		50
Hexachloroethane	77		64		40-140	18		50
Isophorone	84		72		40-140	15		50
Naphthalene	72		60		40-140	18		50
Nitrobenzene	81		69		40-140	16		50
NDPA/DPA	86		71		36-157	19		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1195621-2 WG1195621-3								
n-Nitrosodi-n-propylamine	82		72		32-121	13		50
Bis(2-ethylhexyl)phthalate	80		69		40-140	15		50
Butyl benzyl phthalate	77		76		40-140	1		50
Di-n-butylphthalate	86		76		40-140	12		50
Di-n-octylphthalate	80		80		40-140	0		50
Diethyl phthalate	88		73		40-140	19		50
Dimethyl phthalate	82		76		40-140	8		50
Benzo(a)anthracene	74		63		40-140	16		50
Benzo(a)pyrene	78		76		40-140	3		50
Benzo(b)fluoranthene	80		76		40-140	5		50
Benzo(k)fluoranthene	73		76		40-140	4		50
Chrysene	73		63		40-140	15		50
Acenaphthylene	83		76		40-140	9		50
Anthracene	77		68		40-140	12		50
Benzo(ghi)perylene	77		66		40-140	15		50
Fluorene	86		70		40-140	21		50
Phenanthrene	74		65		40-140	13		50
Dibenzo(a,h)anthracene	78		65		40-140	18		50
Indeno(1,2,3-cd)pyrene	80		66		40-140	19		50
Pyrene	75		70		35-142	7		50
Biphenyl	83		72		54-104	14		50
4-Chloroaniline	41		39	Q	40-140	5		50
2-Nitroaniline	87		80		47-134	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1195621-2 WG1195621-3								
3-Nitroaniline	68		63		26-129	8		50
4-Nitroaniline	88		73		41-125	19		50
Dibenzofuran	81		69		40-140	16		50
2-Methylnaphthalene	76		66		40-140	14		50
1,2,4,5-Tetrachlorobenzene	77		68		40-117	12		50
Acetophenone	86		74		14-144	15		50
2,4,6-Trichlorophenol	85		76		30-130	11		50
p-Chloro-m-cresol	85		75		26-103	13		50
2-Chlorophenol	81		68		25-102	17		50
2,4-Dichlorophenol	85		74		30-130	14		50
2,4-Dimethylphenol	85		75		30-130	13		50
2-Nitrophenol	86		73		30-130	16		50
4-Nitrophenol	96		80		11-114	18		50
2,4-Dinitrophenol	83		77		4-130	8		50
4,6-Dinitro-o-cresol	93		80		10-130	15		50
Pentachlorophenol	78		69		17-109	12		50
Phenol	78		66		26-90	17		50
2-Methylphenol	82		73		30-130.	12		50
3-Methylphenol/4-Methylphenol	84		74		30-130	13		50
2,4,5-Trichlorophenol	84		75		30-130	11		50
Benzoic Acid	46		41		10-110	11		50
Benzyl Alcohol	87		76		40-140	13		50
Carbazole	78		68		54-128	14		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1195621-2 WG1195621-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	83		66		25-120
Phenol-d6	85		70		10-120
Nitrobenzene-d5	84		72		23-120
2-Fluorobiphenyl	79		68		30-120
2,4,6-Tribromophenol	93		79		10-136
4-Terphenyl-d14	66		61		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1195687-2 WG1195687-3								
Acenaphthene	65		71		37-111	9		30
1,2,4-Trichlorobenzene	61		70		39-98	14		30
Hexachlorobenzene	72		75		40-140	4		30
Bis(2-chloroethyl)ether	56		73		40-140	26		30
2-Chloronaphthalene	67		79		40-140	16		30
1,2-Dichlorobenzene	57		70		40-140	20		30
1,3-Dichlorobenzene	54		69		40-140	24		30
1,4-Dichlorobenzene	53		68		36-97	25		30
3,3'-Dichlorobenzidine	74		83		40-140	11		30
2,4-Dinitrotoluene	75		78		48-143	4		30
2,6-Dinitrotoluene	84		83		40-140	1		30
Fluoranthene	77		82		40-140	6		30
4-Chlorophenyl phenyl ether	72		70		40-140	3		30
4-Bromophenyl phenyl ether	74		82		40-140	10		30
Bis(2-chloroisopropyl)ether	61		76		40-140	22		30
Bis(2-chloroethoxy)methane	72		79		40-140	9		30
Hexachlorobutadiene	50		70		40-140	33	Q	30
Hexachlorocyclopentadiene	53		71		40-140	29		30
Hexachloroethane	56		67		40-140	18		30
Isophorone	70		84		40-140	18		30
Naphthalene	58		74		40-140	24		30
Nitrobenzene	62		73		40-140	16		30
NDPA/DPA	78		75		40-140	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1195687-2 WG1195687-3								
n-Nitrosodi-n-propylamine	68		82		29-132	19		30
Bis(2-ethylhexyl)phthalate	88		99		40-140	12		30
Butyl benzyl phthalate	99		105		40-140	6		30
Di-n-butylphthalate	79		83		40-140	5		30
Di-n-octylphthalate	99		100		40-140	1		30
Diethyl phthalate	79		76		40-140	4		30
Dimethyl phthalate	83		81		40-140	2		30
Benzo(a)anthracene	81		88		40-140	8		30
Benzo(a)pyrene	84		86		40-140	2		30
Benzo(b)fluoranthene	84		87		40-140	4		30
Benzo(k)fluoranthene	87		93		40-140	7		30
Chrysene	79		84		40-140	6		30
Acenaphthylene	73		77		45-123	5		30
Anthracene	76		85		40-140	11		30
Benzo(ghi)perylene	80		100		40-140	22		30
Fluorene	73		70		40-140	4		30
Phenanthrene	76		80		40-140	5		30
Dibenzo(a,h)anthracene	80		95		40-140	17		30
Indeno(1,2,3-cd)pyrene	78		91		40-140	15		30
Pyrene	75		82		26-127	9		30
Biphenyl	64		75		40-140	16		30
4-Chloroaniline	60		72		40-140	18		30
2-Nitroaniline	84		88		52-143	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1195687-2 WG1195687-3								
3-Nitroaniline	70		79		25-145	12		30
4-Nitroaniline	79		71		51-143	11		30
Dibenzofuran	70		74		40-140	6		30
2-Methylnaphthalene	62		79		40-140	24		30
1,2,4,5-Tetrachlorobenzene	59		72		2-134	20		30
Acetophenone	63		78		39-129	21		30
2,4,6-Trichlorophenol	78		88		30-130	12		30
p-Chloro-m-cresol	83		90		23-97	8		30
2-Chlorophenol	61		77		27-123	23		30
2,4-Dichlorophenol	80		81		30-130	1		30
2,4-Dimethylphenol	48		58		30-130	19		30
2-Nitrophenol	67		83		30-130	21		30
4-Nitrophenol	73		74		10-80	1		30
2,4-Dinitrophenol	80		82		20-130	2		30
4,6-Dinitro-o-cresol	77		76		20-164	1		30
Pentachlorophenol	80		81		9-103	1		30
Phenol	52		63		12-110	19		30
2-Methylphenol	66		78		30-130	17		30
3-Methylphenol/4-Methylphenol	75		85		30-130	13		30
2,4,5-Trichlorophenol	82		86		30-130	5		30
Benzoic Acid	66		64		10-164	3		30
Benzyl Alcohol	68		76		26-116	11		30
Carbazole	84		89		55-144	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1195687-2 WG1195687-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	62		68		21-120
Phenol-d6	52		61		10-120
Nitrobenzene-d5	61		75		23-120
2-Fluorobiphenyl	69		79		15-120
2,4,6-Tribromophenol	83		76		10-120
4-Terphenyl-d14	70		73		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG1195689-2 WG1195689-3								
Acenaphthene	63		66		40-140	5		40
2-Chloronaphthalene	73		77		40-140	5		40
Fluoranthene	79		81		40-140	3		40
Hexachlorobutadiene	70		72		40-140	3		40
Naphthalene	66		69		40-140	4		40
Benzo(a)anthracene	78		80		40-140	3		40
Benzo(a)pyrene	68		69		40-140	1		40
Benzo(b)fluoranthene	64		65		40-140	2		40
Benzo(k)fluoranthene	67		68		40-140	1		40
Chrysene	71		72		40-140	1		40
Acenaphthylene	77		80		40-140	4		40
Anthracene	72		74		40-140	3		40
Benzo(ghi)perylene	65		65		40-140	0		40
Fluorene	67		70		40-140	4		40
Phenanthrene	70		73		40-140	4		40
Dibenzo(a,h)anthracene	66		67		40-140	2		40
Indeno(1,2,3-cd)pyrene	79		80		40-140	1		40
Pyrene	80		82		40-140	2		40
2-Methylnaphthalene	72		75		40-140	4		40
Pentachlorophenol	66		64		40-140	3		40
Hexachlorobenzene	66		69		40-140	4		40
Hexachloroethane	60		62		40-140	3		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 11 Batch: WG1195689-2 WG1195689-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	52		54		21-120
Phenol-d6	44		45		10-120
Nitrobenzene-d5	73		76		23-120
2-Fluorobiphenyl	74		78		15-120
2,4,6-Tribromophenol	67		69		10-120
4-Terphenyl-d14	81		83		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195621-4 WG1195621-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
Acenaphthene	ND	1570	1300	83		1400	90		31-137	7		50
1,2,4-Trichlorobenzene	ND	1570	1600	100		1700	110	Q	38-107	6		50
Hexachlorobenzene	ND	1570	1500	95		1600	100		40-140	6		50
Bis(2-chloroethyl)ether	ND	1570	1300	83		1400	90		40-140	7		50
2-Chloronaphthalene	ND	1570	1600	100		1800	120		40-140	12		50
1,2-Dichlorobenzene	ND	1570	1400	89		1400	90		40-140	0		50
1,3-Dichlorobenzene	ND	1570	1300	83		1400	90		40-140	7		50
1,4-Dichlorobenzene	ND	1570	1300	83		1400	90		28-104	7		50
3,3'-Dichlorobenzidine	ND	1570	930J	59		1100	71		40-140	17		50
2,4-Dinitrotoluene	ND	1570	1100	70		1300	83		40-132	17		50
2,6-Dinitrotoluene	ND	1570	1300	83		1600	100		40-140	21		50
Fluoranthene	280J	1570	1500	95		1700	110		40-140	13		50
4-Chlorophenyl phenyl ether	ND	1570	1300	83		1500	96		40-140	14		50
4-Bromophenyl phenyl ether	ND	1570	1400	89		1500	96		40-140	7		50
Bis(2-chloroisopropyl)ether	ND	1570	1300	83		1400	90		40-140	7		50
Bis(2-chloroethoxy)methane	ND	1570	1500	95		1800	120	Q	40-117	18		50
Hexachlorobutadiene	ND	1570	1800	110		1900	120		40-140	5		50
Hexachlorocyclopentadiene	ND	1570	1000J	63		1100J	71		40-140	10		50
Hexachloroethane	ND	1570	2800	180	Q	2800	180	Q	40-140	0		50
Isophorone	ND	1570	1800	110		1900	120		40-140	5		50
Naphthalene	22000	1570	11000	0	Q	10000	0	Q	40-140	10		50
Nitrobenzene	ND	1570	730J	46		610J	39	Q	40-140	18		50
NDPA/DPA	ND	1570	1300	83		1400	90		36-157	7		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195621-4 WG1195621-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
n-Nitrosodi-n-propylamine	ND	1570	2000	130	Q	2000	130	Q	32-121	0		50
Bis(2-ethylhexyl)phthalate	ND	1570	1300	83		1500	96		40-140	14		50
Butyl benzyl phthalate	ND	1570	1300	83		1500	96		40-140	14		50
Di-n-butylphthalate	ND	1570	1400	89		1700	110		40-140	19		50
Di-n-octylphthalate	ND	1570	1300	83		1500	96		40-140	14		50
Diethyl phthalate	ND	1570	1300	83		1400	90		40-140	7		50
Dimethyl phthalate	ND	1570	1700	110		1800	120		40-140	6		50
Benzo(a)anthracene	160J	1570	1400	89		1500	96		40-140	7		50
Benzo(a)pyrene	ND	1570	1400	89		1600	100		40-140	13		50
Benzo(b)fluoranthene	ND	1570	1300	83		1500	96		40-140	14		50
Benzo(k)fluoranthene	ND	1570	1400	89		1500	96		40-140	7		50
Chrysene	140J	1570	1400	89		1500	96		40-140	7		50
Acenaphthylene	ND	1570	1600	100		1800	120		40-140	12		50
Anthracene	ND	1570	1500	95		1600	100		40-140	6		50
Benzo(ghi)perylene	120J	1570	1400	89		1500	96		40-140	7		50
Fluorene	170J	1570	1400	89		1500	96		40-140	7		50
Phenanthrene	320J	1570	1500	95		1600	100		40-140	6		50
Dibenzo(a,h)anthracene	ND	1570	1400	89		1500	96		40-140	7		50
Indeno(1,2,3-cd)pyrene	ND	1570	1400	89		1500	96		40-140	7		50
Pyrene	330J	1570	1400	89		1700	110		35-142	19		50
Biphenyl	460J	1570	1800J	110	Q	1900J	120	Q	54-104	5		50
4-Chloroaniline	ND	1570	870J	55		980	63		40-140	12		50
2-Nitroaniline	ND	1570	1800	110		2000	130		47-134	11		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195621-4 WG1195621-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
3-Nitroaniline	ND	1570	960J	61		1200	77		26-129	22		50
4-Nitroaniline	ND	1570	1200	76		1300	83		41-125	8		50
Dibenzofuran	ND	1570	1300	83		1400	90		40-140	7		50
2-Methylnaphthalene	16000	1570	8800	0	Q	8400	0	Q	40-140	5		50
1,2,4,5-Tetrachlorobenzene	ND	1570	1700	110		1800	120	Q	40-117	6		50
Acetophenone	ND	1570	ND	0	Q	ND	0	Q	14-144	NC		50
2,4,6-Trichlorophenol	ND	1570	1700	110		1800	120		30-130	6		50
p-Chloro-m-cresol	ND	1570	1600	100		1800	120	Q	26-103	12		50
2-Chlorophenol	ND	1570	1400	89		1600	100		25-102	13		50
2,4-Dichlorophenol	ND	1570	1600	100		1700	110		30-130	6		50
2,4-Dimethylphenol	ND	1570	1600	100		1700	110		30-130	6		50
2-Nitrophenol	ND	1570	1000J	63		1100J	71		30-130	10		50
4-Nitrophenol	ND	1570	1300J	83		1700	110		11-114	27		50
2,4-Dinitrophenol	ND	1570	ND	0	Q	ND	0	Q	4-130	NC		50
4,6-Dinitro-o-cresol	ND	1570	ND	0	Q	ND	0	Q	10-130	NC		50
Pentachlorophenol	ND	1570	1500	95		1500	96		17-109	0		50
Phenol	ND	1570	1400	89		1500	96	Q	26-90	7		50
2-Methylphenol	ND	1570	1500	95		1600	100		30-130.	6		50
3-Methylphenol/4-Methylphenol	ND	1570	1500	95		1500	96		30-130	0		50
2,4,5-Trichlorophenol	ND	1570	1800	110		1900	120		30-130	5		50
Benzoic Acid	ND	1570	ND	0	Q	ND	0	Q	10-110	NC		50
Benzyl Alcohol	ND	1570	1800	110		1900	120		40-140	5		50
Carbazole	ND	1570	1400	89		1600	100		54-128	13		50

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatiles Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195621-4 WG1195621-5 QC Sample: L1900707-03 Client ID: RB13_22-24

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	103		108		10-136
2-Fluorobiphenyl	107		111		30-120
2-Fluorophenol	88		93		25-120
4-Terphenyl-d14	83		97		18-120
Nitrobenzene-d5	116		116		23-120
Phenol-d6	85		96		10-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 15:10
 Analyst: WR
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:37
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.6	3.43	1	A
Aroclor 1221	ND		ug/kg	38.6	3.87	1	A
Aroclor 1232	ND		ug/kg	38.6	8.19	1	A
Aroclor 1242	ND		ug/kg	38.6	5.21	1	A
Aroclor 1248	ND		ug/kg	38.6	5.79	1	A
Aroclor 1254	ND		ug/kg	38.6	4.23	1	A
Aroclor 1260	ND		ug/kg	38.6	7.14	1	A
Aroclor 1262	ND		ug/kg	38.6	4.91	1	A
Aroclor 1268	ND		ug/kg	38.6	4.00	1	A
PCBs, Total	ND		ug/kg	38.6	3.43	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	47		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 15:22
 Analyst: WR
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.7	3.35	1	A
Aroclor 1221	ND		ug/kg	37.7	3.78	1	A
Aroclor 1232	ND		ug/kg	37.7	8.00	1	A
Aroclor 1242	ND		ug/kg	37.7	5.08	1	A
Aroclor 1248	ND		ug/kg	37.7	5.66	1	A
Aroclor 1254	ND		ug/kg	37.7	4.13	1	A
Aroclor 1260	ND		ug/kg	37.7	6.97	1	A
Aroclor 1262	ND		ug/kg	37.7	4.79	1	A
Aroclor 1268	ND		ug/kg	37.7	3.91	1	A
PCBs, Total	ND		ug/kg	37.7	3.35	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03
Client ID: RB13_22-24
Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/08/19 15:35
Analyst: WR
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 01/08/19 05:33
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.3	3.40	1	A
Aroclor 1221	ND		ug/kg	38.3	3.83	1	A
Aroclor 1232	ND		ug/kg	38.3	8.11	1	A
Aroclor 1242	ND		ug/kg	38.3	5.16	1	A
Aroclor 1248	ND		ug/kg	38.3	5.74	1	A
Aroclor 1254	ND		ug/kg	38.3	4.19	1	A
Aroclor 1260	ND		ug/kg	38.3	7.07	1	A
Aroclor 1262	ND		ug/kg	38.3	4.86	1	A
Aroclor 1268	ND		ug/kg	38.3	3.96	1	A
PCBs, Total	ND		ug/kg	38.3	3.40	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 15:47
 Analyst: WR
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.0	3.28	1	A
Aroclor 1221	ND		ug/kg	37.0	3.70	1	A
Aroclor 1232	ND		ug/kg	37.0	7.84	1	A
Aroclor 1242	ND		ug/kg	37.0	4.98	1	A
Aroclor 1248	ND		ug/kg	37.0	5.54	1	A
Aroclor 1254	ND		ug/kg	37.0	4.04	1	A
Aroclor 1260	ND		ug/kg	37.0	6.83	1	A
Aroclor 1262	ND		ug/kg	37.0	4.69	1	A
Aroclor 1268	ND		ug/kg	37.0	3.83	1	A
PCBs, Total	ND		ug/kg	37.0	3.28	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	50		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
Client ID: RB14_0-2
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/08/19 15:59
Analyst: WR
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 01/08/19 05:33
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.7	3.43	1	A
Aroclor 1221	ND		ug/kg	38.7	3.87	1	A
Aroclor 1232	ND		ug/kg	38.7	8.20	1	A
Aroclor 1242	ND		ug/kg	38.7	5.21	1	A
Aroclor 1248	ND		ug/kg	38.7	5.80	1	A
Aroclor 1254	ND		ug/kg	38.7	4.23	1	A
Aroclor 1260	ND		ug/kg	38.7	7.15	1	A
Aroclor 1262	ND		ug/kg	38.7	4.91	1	A
Aroclor 1268	ND		ug/kg	38.7	4.01	1	A
PCBs, Total	ND		ug/kg	38.7	3.43	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	40		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 16:12
 Analyst: WR
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.9	3.28	1	A
Aroclor 1221	ND		ug/kg	36.9	3.70	1	A
Aroclor 1232	ND		ug/kg	36.9	7.82	1	A
Aroclor 1242	ND		ug/kg	36.9	4.97	1	A
Aroclor 1248	ND		ug/kg	36.9	5.53	1	A
Aroclor 1254	ND		ug/kg	36.9	4.03	1	A
Aroclor 1260	ND		ug/kg	36.9	6.82	1	A
Aroclor 1262	ND		ug/kg	36.9	4.68	1	A
Aroclor 1268	ND		ug/kg	36.9	3.82	1	A
PCBs, Total	ND		ug/kg	36.9	3.28	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/09/19 13:46
 Analyst: WR
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.6	3.52	1	A
Aroclor 1221	ND		ug/kg	39.6	3.97	1	A
Aroclor 1232	ND		ug/kg	39.6	8.41	1	A
Aroclor 1242	ND		ug/kg	39.6	5.34	1	A
Aroclor 1248	ND		ug/kg	39.6	5.95	1	A
Aroclor 1254	ND		ug/kg	39.6	4.34	1	A
Aroclor 1260	ND		ug/kg	39.6	7.33	1	A
Aroclor 1262	ND		ug/kg	39.6	5.04	1	A
Aroclor 1268	ND		ug/kg	39.6	4.11	1	A
PCBs, Total	ND		ug/kg	39.6	3.52	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	148		30-150	A
Decachlorobiphenyl	139		30-150	A
2,4,5,6-Tetrachloro-m-xylene	152	Q	30-150	B
Decachlorobiphenyl	160	Q	30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/08/19 16:36
 Analyst: WR
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:33
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	3.27	1	A
Aroclor 1221	ND		ug/kg	36.8	3.69	1	A
Aroclor 1232	ND		ug/kg	36.8	7.80	1	A
Aroclor 1242	ND		ug/kg	36.8	4.96	1	A
Aroclor 1248	ND		ug/kg	36.8	5.52	1	A
Aroclor 1254	ND		ug/kg	36.8	4.03	1	A
Aroclor 1260	ND		ug/kg	36.8	6.80	1	A
Aroclor 1262	ND		ug/kg	36.8	4.67	1	A
Aroclor 1268	ND		ug/kg	36.8	3.81	1	A
PCBs, Total	ND		ug/kg	36.8	3.27	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
Client ID: SODUP04_010719
Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/09/19 02:06
Analyst: WR
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 01/08/19 05:37
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.5	3.51	1	A
Aroclor 1221	ND		ug/kg	39.5	3.96	1	A
Aroclor 1232	ND		ug/kg	39.5	8.37	1	A
Aroclor 1242	ND		ug/kg	39.5	5.32	1	A
Aroclor 1248	ND		ug/kg	39.5	5.92	1	A
Aroclor 1254	ND		ug/kg	39.5	4.32	1	A
Aroclor 1260	ND		ug/kg	39.5	7.30	1	A
Aroclor 1262	ND		ug/kg	39.5	5.02	1	A
Aroclor 1268	ND		ug/kg	39.5	4.09	1	A
PCBs, Total	ND		ug/kg	39.5	3.51	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 01/09/19 14:11
 Analyst: HT

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 08:22
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/08/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/09/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/08/19 07:19
 Analyst: HT

Extraction Method: EPA 3546
 Extraction Date: 01/07/19 06:21
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/07/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/07/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-09 Batch: WG1195268-1						
Aroclor 1016	ND		ug/kg	31.7	2.82	A
Aroclor 1221	ND		ug/kg	31.7	3.18	A
Aroclor 1232	ND		ug/kg	31.7	6.72	A
Aroclor 1242	ND		ug/kg	31.7	4.28	A
Aroclor 1248	ND		ug/kg	31.7	4.76	A
Aroclor 1254	ND		ug/kg	31.7	3.47	A
Aroclor 1260	ND		ug/kg	31.7	5.86	A
Aroclor 1262	ND		ug/kg	31.7	4.03	A
Aroclor 1268	ND		ug/kg	31.7	3.29	A
PCBs, Total	ND		ug/kg	31.7	2.82	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	96		30-150	A
2,4,5,6-Tetrachloro-m-xylene	102		30-150	B
Decachlorobiphenyl	105		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 01/09/19 11:01
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 08:22
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/09/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 11 Batch: WG1195614-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	87		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1195268-2 WG1195268-3									
Aroclor 1016	85		80		40-140	6		50	A
Aroclor 1260	80		79		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		89		30-150	A
Decachlorobiphenyl	97		95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	96		97		30-150	B
Decachlorobiphenyl	100		103		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 11 Batch: WG1195614-2 WG1195614-3									
Aroclor 1016	73		77		40-140	6		50	A
Aroclor 1260	75		79		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		84		30-150	A
Decachlorobiphenyl	73		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		86		30-150	B
Decachlorobiphenyl	80		89		30-150	B

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195268-4 WG1195268-5 QC Sample: L1900707-03 Client ID: RB13_22-24													
Aroclor 1016	ND	247	91.6	37	Q	90.9	38	Q	40-140	1		50	A
Aroclor 1260	ND	247	98.0	40	Q	92.9	38	Q	40-140	5		50	A

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	31		30		30-150	A
Decachlorobiphenyl	42		39		30-150	A
2,4,5,6-Tetrachloro-m-xylene	37		33		30-150	B
Decachlorobiphenyl	43		37		30-150	B

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Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:17
 Analyst: BM
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:41
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.360	1	A
Lindane	ND		ug/kg	0.766	0.343	1	A
Alpha-BHC	ND		ug/kg	0.766	0.218	1	A
Beta-BHC	ND		ug/kg	1.84	0.698	1	A
Heptachlor	ND		ug/kg	0.920	0.412	1	A
Aldrin	ND		ug/kg	1.84	0.648	1	A
Heptachlor epoxide	ND		ug/kg	3.45	1.03	1	A
Endrin	ND		ug/kg	0.766	0.314	1	A
Endrin aldehyde	ND		ug/kg	2.30	0.805	1	A
Endrin ketone	ND		ug/kg	1.84	0.474	1	A
Dieldrin	ND		ug/kg	1.15	0.575	1	A
4,4'-DDE	ND		ug/kg	1.84	0.425	1	A
4,4'-DDD	ND		ug/kg	1.84	0.656	1	A
4,4'-DDT	ND		ug/kg	3.45	1.48	1	A
Endosulfan I	ND		ug/kg	1.84	0.435	1	A
Endosulfan II	ND		ug/kg	1.84	0.615	1	A
Endosulfan sulfate	ND		ug/kg	0.766	0.365	1	A
Methoxychlor	ND		ug/kg	3.45	1.07	1	A
Toxaphene	ND		ug/kg	34.5	9.66	1	A
cis-Chlordane	ND		ug/kg	2.30	0.641	1	A
trans-Chlordane	ND		ug/kg	2.30	0.607	1	A
Chlordane	ND		ug/kg	14.9	6.09	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-01

Date Collected: 01/07/19 10:45

Client ID: RB13_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	101		30-150	B
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	95		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01
 Client ID: RB13_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:45
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 22:14
 Analyst: SL
 Percent Solids: 86%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	192	12.1	1	A
2,4,5-T	ND		ug/kg	192	5.94	1	A
2,4,5-TP (Silvex)	ND		ug/kg	192	5.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	90		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:29
 Analyst: BM
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:41
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.86	0.363	1	A
Lindane	ND		ug/kg	0.773	0.346	1	A
Alpha-BHC	ND		ug/kg	0.773	0.220	1	A
Beta-BHC	ND		ug/kg	1.86	0.703	1	A
Heptachlor	ND		ug/kg	0.928	0.416	1	A
Aldrin	ND		ug/kg	1.86	0.653	1	A
Heptachlor epoxide	ND		ug/kg	3.48	1.04	1	A
Endrin	ND		ug/kg	0.773	0.317	1	A
Endrin aldehyde	ND		ug/kg	2.32	0.812	1	A
Endrin ketone	ND		ug/kg	1.86	0.478	1	A
Dieldrin	ND		ug/kg	1.16	0.580	1	A
4,4'-DDE	ND		ug/kg	1.86	0.429	1	A
4,4'-DDD	ND		ug/kg	1.86	0.662	1	A
4,4'-DDT	ND		ug/kg	3.48	1.49	1	A
Endosulfan I	ND		ug/kg	1.86	0.438	1	A
Endosulfan II	ND		ug/kg	1.86	0.620	1	A
Endosulfan sulfate	ND		ug/kg	0.773	0.368	1	A
Methoxychlor	ND		ug/kg	3.48	1.08	1	A
Toxaphene	ND		ug/kg	34.8	9.74	1	A
cis-Chlordane	ND		ug/kg	2.32	0.646	1	A
trans-Chlordane	ND		ug/kg	2.32	0.612	1	A
Chlordane	ND		ug/kg	15.1	6.14	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	104		30-150	B
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	104		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02
 Client ID: RB13_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 11:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 22:34
 Analyst: SL
 Percent Solids: 84%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	195	12.3	1	A
2,4,5-T	ND		ug/kg	195	6.04	1	A
2,4,5-TP (Silvex)	ND		ug/kg	195	5.18	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	110		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:42
 Analyst: BM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:41
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.87	0.366	1	A
Lindane	ND		ug/kg	0.780	0.348	1	A
Alpha-BHC	ND		ug/kg	0.780	0.221	1	A
Beta-BHC	ND		ug/kg	1.87	0.710	1	A
Heptachlor	ND		ug/kg	0.936	0.420	1	A
Aldrin	ND		ug/kg	1.87	0.659	1	A
Heptachlor epoxide	ND		ug/kg	3.51	1.05	1	A
Endrin	ND		ug/kg	0.780	0.320	1	A
Endrin aldehyde	ND		ug/kg	2.34	0.819	1	A
Endrin ketone	ND		ug/kg	1.87	0.482	1	A
Dieldrin	ND		ug/kg	1.17	0.585	1	A
4,4'-DDE	ND		ug/kg	1.87	0.433	1	A
4,4'-DDD	ND		ug/kg	1.87	0.668	1	A
4,4'-DDT	ND		ug/kg	3.51	1.50	1	A
Endosulfan I	ND		ug/kg	1.87	0.442	1	A
Endosulfan II	ND		ug/kg	1.87	0.625	1	A
Endosulfan sulfate	ND		ug/kg	0.780	0.371	1	A
Methoxychlor	ND		ug/kg	3.51	1.09	1	A
Toxaphene	ND		ug/kg	35.1	9.82	1	A
cis-Chlordane	ND		ug/kg	2.34	0.652	1	A
trans-Chlordane	ND		ug/kg	2.34	0.618	1	A
Chlordane	ND		ug/kg	15.2	6.20	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	642	Q	30-150	A
Decachlorobiphenyl	131		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-03
 Client ID: RB13_22-24
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:50
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 22:54
 Analyst: SL
 Percent Solids: 83%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	197	12.4	1	A
2,4,5-T	ND		ug/kg	197	6.09	1	A
2,4,5-TP (Silvex)	ND		ug/kg	197	5.23	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	108		30-150	A
DCAA	85		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:55
 Analyst: BM
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:41
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.339	1	A
Lindane	ND		ug/kg	0.721	0.322	1	A
Alpha-BHC	ND		ug/kg	0.721	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.656	1	A
Heptachlor	ND		ug/kg	0.866	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.610	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.974	1	A
Endrin	ND		ug/kg	0.721	0.296	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.757	1	A
Endrin ketone	ND		ug/kg	1.73	0.446	1	A
Dieldrin	ND		ug/kg	1.08	0.541	1	A
4,4'-DDE	ND		ug/kg	1.73	0.400	1	A
4,4'-DDD	ND		ug/kg	1.73	0.617	1	A
4,4'-DDT	ND		ug/kg	3.24	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.409	1	A
Endosulfan II	ND		ug/kg	1.73	0.578	1	A
Endosulfan sulfate	ND		ug/kg	0.721	0.343	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.09	1	A
cis-Chlordane	ND		ug/kg	2.16	0.603	1	A
trans-Chlordane	ND		ug/kg	2.16	0.571	1	A
Chlordane	ND		ug/kg	14.1	5.73	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	B
Decachlorobiphenyl	117		30-150	B
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	94		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04
 Client ID: RB13_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 10:55
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 23:14
 Analyst: SL
 Percent Solids: 89%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	185	11.7	1	A
2,4,5-T	ND		ug/kg	185	5.74	1	A
2,4,5-TP (Silvex)	ND		ug/kg	185	4.93	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 13:07
 Analyst: BM
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:44
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.83	0.358	1	A
Lindane	ND		ug/kg	0.762	0.340	1	A
Alpha-BHC	ND		ug/kg	0.762	0.216	1	A
Beta-BHC	ND		ug/kg	1.83	0.693	1	A
Heptachlor	ND		ug/kg	0.914	0.410	1	A
Aldrin	ND		ug/kg	1.83	0.644	1	A
Heptachlor epoxide	ND		ug/kg	3.43	1.03	1	A
Endrin	ND		ug/kg	0.762	0.312	1	A
Endrin aldehyde	ND		ug/kg	2.28	0.800	1	A
Endrin ketone	ND		ug/kg	1.83	0.471	1	A
Dieldrin	ND		ug/kg	1.14	0.571	1	A
4,4'-DDE	ND		ug/kg	1.83	0.423	1	A
4,4'-DDD	ND		ug/kg	1.83	0.652	1	A
4,4'-DDT	ND		ug/kg	3.43	1.47	1	A
Endosulfan I	ND		ug/kg	1.83	0.432	1	A
Endosulfan II	ND		ug/kg	1.83	0.611	1	A
Endosulfan sulfate	ND		ug/kg	0.762	0.363	1	A
Methoxychlor	ND		ug/kg	3.43	1.07	1	A
Toxaphene	ND		ug/kg	34.3	9.60	1	A
cis-Chlordane	ND		ug/kg	2.28	0.637	1	A
trans-Chlordane	ND		ug/kg	2.28	0.603	1	A
Chlordane	ND		ug/kg	14.8	6.06	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	92		30-150	B
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	100		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05
 Client ID: RB14_0-2
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:20
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 23:33
 Analyst: SL
 Percent Solids: 86%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	191	12.0	1	A
2,4,5-T	ND		ug/kg	191	5.91	1	A
2,4,5-TP (Silvex)	ND		ug/kg	191	5.07	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	86		30-150	A
DCAA	83		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 13:20
 Analyst: BM
 Percent Solids: 86%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:44
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.348	1	A
Lindane	ND		ug/kg	0.740	0.330	1	A
Alpha-BHC	ND		ug/kg	0.740	0.210	1	A
Beta-BHC	ND		ug/kg	1.77	0.673	1	A
Heptachlor	ND		ug/kg	0.887	0.398	1	A
Aldrin	ND		ug/kg	1.77	0.625	1	A
Heptachlor epoxide	ND		ug/kg	3.33	0.998	1	A
Endrin	ND		ug/kg	0.740	0.303	1	A
Endrin aldehyde	ND		ug/kg	2.22	0.776	1	A
Endrin ketone	ND		ug/kg	1.77	0.457	1	A
Dieldrin	ND		ug/kg	1.11	0.555	1	A
4,4'-DDE	ND		ug/kg	1.77	0.410	1	A
4,4'-DDD	ND		ug/kg	1.77	0.633	1	A
4,4'-DDT	ND		ug/kg	3.33	1.43	1	A
Endosulfan I	ND		ug/kg	1.77	0.419	1	A
Endosulfan II	ND		ug/kg	1.77	0.593	1	A
Endosulfan sulfate	ND		ug/kg	0.740	0.352	1	A
Methoxychlor	ND		ug/kg	3.33	1.04	1	A
Toxaphene	ND		ug/kg	33.3	9.32	1	A
cis-Chlordane	ND		ug/kg	2.22	0.618	1	A
trans-Chlordane	ND		ug/kg	2.22	0.586	1	A
Chlordane	ND		ug/kg	14.4	5.88	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	107		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06
 Client ID: RB14_18-20
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:25
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 23:53
 Analyst: SL
 Percent Solids: 86%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	190	12.0	1	A
2,4,5-T	ND		ug/kg	190	5.90	1	A
2,4,5-TP (Silvex)	ND		ug/kg	190	5.06	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	99		30-150	A
DCAA	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/14/19 18:26
 Analyst: SL
 Percent Solids: 82%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:44
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.86	0.365	1	A
Lindane	ND		ug/kg	0.776	0.347	1	A
Alpha-BHC	ND		ug/kg	0.776	0.220	1	A
Beta-BHC	ND		ug/kg	1.86	0.706	1	A
Heptachlor	ND		ug/kg	0.932	0.418	1	A
Aldrin	ND		ug/kg	1.86	0.656	1	A
Heptachlor epoxide	ND		ug/kg	3.49	1.05	1	A
Endrin	ND		ug/kg	0.776	0.318	1	A
Endrin aldehyde	ND		ug/kg	2.33	0.815	1	A
Endrin ketone	ND		ug/kg	1.86	0.480	1	A
Dieldrin	ND		ug/kg	1.16	0.582	1	A
4,4'-DDE	ND		ug/kg	1.86	0.431	1	A
4,4'-DDD	ND		ug/kg	1.86	0.664	1	A
4,4'-DDT	ND		ug/kg	3.49	1.50	1	A
Endosulfan I	ND		ug/kg	1.86	0.440	1	A
Endosulfan II	ND		ug/kg	1.86	0.623	1	A
Endosulfan sulfate	ND		ug/kg	0.776	0.370	1	A
Methoxychlor	ND		ug/kg	3.49	1.09	1	A
Toxaphene	ND		ug/kg	34.9	9.78	1	A
cis-Chlordane	ND		ug/kg	2.33	0.649	1	A
trans-Chlordane	ND		ug/kg	2.33	0.615	1	A
Chlordane	ND		ug/kg	15.1	6.17	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	115		30-150	B
Decachlorobiphenyl	155	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	133		30-150	A
Decachlorobiphenyl	148		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07
 Client ID: RB14_23-25
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/11/19 00:13
 Analyst: SL
 Percent Solids: 82%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	200	12.6	1	A
2,4,5-T	ND		ug/kg	200	6.22	1	A
2,4,5-TP (Silvex)	ND		ug/kg	200	5.33	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	108		30-150	A
DCAA	100		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 13:46
 Analyst: BM
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:44
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.73	0.339	1	A
Lindane	ND		ug/kg	0.721	0.322	1	A
Alpha-BHC	ND		ug/kg	0.721	0.205	1	A
Beta-BHC	ND		ug/kg	1.73	0.656	1	A
Heptachlor	ND		ug/kg	0.865	0.388	1	A
Aldrin	ND		ug/kg	1.73	0.609	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.973	1	A
Endrin	ND		ug/kg	0.721	0.296	1	A
Endrin aldehyde	ND		ug/kg	2.16	0.757	1	A
Endrin ketone	ND		ug/kg	1.73	0.445	1	A
Dieldrin	ND		ug/kg	1.08	0.541	1	A
4,4'-DDE	ND		ug/kg	1.73	0.400	1	A
4,4'-DDD	ND		ug/kg	1.73	0.617	1	A
4,4'-DDT	ND		ug/kg	3.24	1.39	1	A
Endosulfan I	ND		ug/kg	1.73	0.409	1	A
Endosulfan II	ND		ug/kg	1.73	0.578	1	A
Endosulfan sulfate	ND		ug/kg	0.721	0.343	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.08	1	A
cis-Chlordane	ND		ug/kg	2.16	0.603	1	A
trans-Chlordane	ND		ug/kg	2.16	0.571	1	A
Chlordane	ND		ug/kg	14.0	5.73	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	107		30-150	B
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	99		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
 Client ID: RB14_33-35
 Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/11/19 00:52
 Analyst: SL
 Percent Solids: 90%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	183	11.5	1	B
2,4,5-T	ND		ug/kg	183	5.66	1	A
2,4,5-TP (Silvex)	ND		ug/kg	183	4.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	89		30-150	A
DCAA	82		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 13:58
 Analyst: BM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/08/19 05:44
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.87	0.367	1	A
Lindane	ND		ug/kg	0.780	0.349	1	A
Alpha-BHC	ND		ug/kg	0.780	0.222	1	A
Beta-BHC	ND		ug/kg	1.87	0.710	1	A
Heptachlor	ND		ug/kg	0.937	0.420	1	A
Aldrin	ND		ug/kg	1.87	0.660	1	A
Heptachlor epoxide	ND		ug/kg	3.51	1.05	1	A
Endrin	ND		ug/kg	0.780	0.320	1	A
Endrin aldehyde	ND		ug/kg	2.34	0.820	1	A
Endrin ketone	ND		ug/kg	1.87	0.482	1	A
Dieldrin	ND		ug/kg	1.17	0.585	1	A
4,4'-DDE	ND		ug/kg	1.87	0.433	1	A
4,4'-DDD	ND		ug/kg	1.87	0.668	1	A
4,4'-DDT	ND		ug/kg	3.51	1.51	1	A
Endosulfan I	ND		ug/kg	1.87	0.442	1	A
Endosulfan II	ND		ug/kg	1.87	0.626	1	A
Endosulfan sulfate	ND		ug/kg	0.780	0.372	1	A
Methoxychlor	ND		ug/kg	3.51	1.09	1	A
Toxaphene	ND		ug/kg	35.1	9.83	1	A
cis-Chlordane	ND		ug/kg	2.34	0.652	1	A
trans-Chlordane	ND		ug/kg	2.34	0.618	1	A
Chlordane	ND		ug/kg	15.2	6.20	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	104		30-150	B
Decachlorobiphenyl	87		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	84		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-09
 Client ID: SODUP04_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 00:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/11/19 01:12
 Analyst: SL
 Percent Solids: 83%
 Methylation Date: 01/09/19 23:01

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	199	12.6	1	A
2,4,5-T	ND		ug/kg	199	6.18	1	A
2,4,5-TP (Silvex)	ND		ug/kg	199	5.30	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	106		30-150	A
DCAA	84		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
Client ID: SOFB03_010719
Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 01/10/19 13:53
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	54		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 20:16
 Analyst: SL

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 18:22

Methylation Date: 01/10/19 03:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	103		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/08/19 11:20
Analyst: SL

Extraction Method: EPA 3546
Extraction Date: 01/07/19 06:46
Cleanup Method: EPA 3620B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-06,08-09 Batch: WG1195277-1						
Delta-BHC	ND		ug/kg	1.52	0.297	A
Lindane	ND		ug/kg	0.633	0.283	A
Alpha-BHC	ND		ug/kg	0.633	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.576	A
Heptachlor	ND		ug/kg	0.759	0.340	A
Aldrin	ND		ug/kg	1.52	0.535	A
Heptachlor epoxide	ND		ug/kg	2.85	0.854	A
Endrin	ND		ug/kg	0.633	0.259	A
Endrin aldehyde	ND		ug/kg	1.90	0.664	A
Endrin ketone	ND		ug/kg	1.52	0.391	A
Dieldrin	ND		ug/kg	0.949	0.475	A
4,4'-DDE	ND		ug/kg	1.52	0.351	A
4,4'-DDD	ND		ug/kg	1.52	0.542	A
4,4'-DDT	ND		ug/kg	2.85	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.359	A
Endosulfan II	ND		ug/kg	1.52	0.508	A
Endosulfan sulfate	ND		ug/kg	0.633	0.301	A
Methoxychlor	ND		ug/kg	2.85	0.886	A
Toxaphene	ND		ug/kg	28.5	7.97	A
cis-Chlordane	ND		ug/kg	1.90	0.529	A
trans-Chlordane	ND		ug/kg	1.90	0.501	A
Chlordane	ND		ug/kg	12.3	5.03	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/08/19 11:20
 Analyst: SL

Extraction Method: EPA 3546
 Extraction Date: 01/07/19 06:46
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-06,08-09 Batch: WG1195277-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	109		30-150	B
Decachlorobiphenyl	112		30-150	B
2,4,5,6-Tetrachloro-m-xylene	118		30-150	A
Decachlorobiphenyl	143		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/10/19 12:25
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG1195638-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:25
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 11 Batch: WG1195638-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 01/10/19 21:15
 Analyst: SL

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 01:20

Methylation Date: 01/09/19 23:01

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1195880-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.02	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.30	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	85		30-150	A
DCAA	73		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 01/10/19 11:42
Analyst: KEG

Extraction Method: EPA 8151A
Extraction Date: 01/09/19 18:22

Methylation Date: 01/10/19 03:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 11 Batch: WG1196169-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/11/19 14:44
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 01/07/19 06:46
Cleanup Method: EPA 3620B
Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 07 Batch: WG1196837-1						
Delta-BHC	ND		ug/kg	1.52	0.297	A
Lindane	ND		ug/kg	0.633	0.283	A
Alpha-BHC	ND		ug/kg	0.633	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.576	A
Heptachlor	ND		ug/kg	0.759	0.340	A
Aldrin	ND		ug/kg	1.52	0.535	A
Heptachlor epoxide	ND		ug/kg	2.85	0.854	A
Endrin	ND		ug/kg	0.633	0.259	A
Endrin aldehyde	ND		ug/kg	1.90	0.664	A
Endrin ketone	ND		ug/kg	1.52	0.391	A
Dieldrin	ND		ug/kg	0.949	0.475	A
4,4'-DDE	ND		ug/kg	1.52	0.351	A
4,4'-DDD	ND		ug/kg	1.52	0.542	A
4,4'-DDT	ND		ug/kg	2.85	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.359	A
Endosulfan II	ND		ug/kg	1.52	0.508	A
Endosulfan sulfate	ND		ug/kg	0.633	0.301	A
Methoxychlor	ND		ug/kg	2.85	0.886	A
Toxaphene	ND		ug/kg	28.5	7.97	A
cis-Chlordane	ND		ug/kg	1.90	0.529	A
trans-Chlordane	ND		ug/kg	1.90	0.501	A
Chlordane	ND		ug/kg	12.3	5.03	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/11/19 14:44
 Analyst: BM

Extraction Method: EPA 3546
 Extraction Date: 01/07/19 06:46
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/08/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 07 Batch: WG1196837-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	123		30-150	B
Decachlorobiphenyl	152	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	131		30-150	A
Decachlorobiphenyl	154	Q	30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06,08-09 Batch: WG1195277-2 WG1195277-3									
Delta-BHC	114		101		30-150	12		30	A
Lindane	117		100		30-150	16		30	A
Alpha-BHC	126		101		30-150	22		30	A
Beta-BHC	103		92		30-150	11		30	A
Heptachlor	122		104		30-150	16		30	A
Aldrin	114		95		30-150	18		30	A
Heptachlor epoxide	116		104		30-150	11		30	A
Endrin	130		116		30-150	11		30	A
Endrin aldehyde	69		67		30-150	3		30	A
Endrin ketone	91		92		30-150	1		30	A
Dieldrin	135		117		30-150	14		30	A
4,4'-DDE	112		88		30-150	24		30	A
4,4'-DDD	123		109		30-150	12		30	A
4,4'-DDT	131		115		30-150	13		30	A
Endosulfan I	111		97		30-150	13		30	A
Endosulfan II	112		101		30-150	10		30	A
Endosulfan sulfate	60		70		30-150	15		30	A
Methoxychlor	129		115		30-150	11		30	A
cis-Chlordane	97		85		30-150	13		30	A
trans-Chlordane	79		76		30-150	4		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06,08-09 Batch: WG1195277-2 WG1195277-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	115		100		30-150	B
Decachlorobiphenyl	128		113		30-150	B
2,4,5,6-Tetrachloro-m-xylene	107		92		30-150	A
Decachlorobiphenyl	141		123		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1195638-2 WG1195638-3									
Delta-BHC	72		83		30-150	14		20	A
Lindane	72		78		30-150	7		20	A
Alpha-BHC	75		82		30-150	9		20	A
Beta-BHC	76		88		30-150	14		20	A
Heptachlor	72		78		30-150	8		20	A
Aldrin	71		76		30-150	8		20	A
Heptachlor epoxide	77		84		30-150	9		20	A
Endrin	75		83		30-150	11		20	A
Endrin aldehyde	59		62		30-150	5		20	A
Endrin ketone	69		82		30-150	17		20	A
Dieldrin	77		85		30-150	9		20	A
4,4'-DDE	74		82		30-150	10		20	A
4,4'-DDD	76		79		30-150	4		20	A
4,4'-DDT	71		75		30-150	6		20	A
Endosulfan I	71		78		30-150	10		20	A
Endosulfan II	71		76		30-150	7		20	A
Endosulfan sulfate	65		78		30-150	19		20	A
Methoxychlor	71		83		30-150	16		20	A
cis-Chlordane	64		69		30-150	7		20	A
trans-Chlordane	69		75		30-150	9		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1195638-2 WG1195638-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	72		81		30-150	A
Decachlorobiphenyl	36		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		81		30-150	B
Decachlorobiphenyl	36		44		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1195880-2 WG1195880-3									
2,4-D	105		117		30-150	11		30	A
2,4,5-T	90		89		30-150	1		30	A
2,4,5-TP (Silvex)	87		86		30-150	1		30	A

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria	Column
DCAA	86		89		30-150	A
DCAA	95		92		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 11 Batch: WG1196169-2 WG1196169-3									
2,4-D	100		101		30-150	1		25	A
2,4,5-T	100		98		30-150	2		25	A
2,4,5-TP (Silvex)	99		100		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	101		100		30-150	A
DCAA	97		96		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 07 Batch: WG1196837-2 WG1196837-3									
Delta-BHC	112		101		30-150	10		30	A
Lindane	119		103		30-150	14		30	A
Alpha-BHC	130		110		30-150	17		30	A
Beta-BHC	108		96		30-150	12		30	A
Heptachlor	124		107		30-150	15		30	A
Aldrin	123		107		30-150	14		30	A
Heptachlor epoxide	112		108		30-150	4		30	A
Endrin	132		123		30-150	7		30	A
Endrin aldehyde	69		72		30-150	4		30	A
Endrin ketone	93		97		30-150	4		30	A
Dieldrin	124		117		30-150	6		30	A
4,4'-DDE	127		103		30-150	21		30	A
4,4'-DDD	127		117		30-150	8		30	A
4,4'-DDT	132		122		30-150	8		30	A
Endosulfan I	117		107		30-150	9		30	A
Endosulfan II	115		108		30-150	6		30	A
Endosulfan sulfate	42		54		30-150	25		30	A
Methoxychlor	130		124		30-150	5		30	A
cis-Chlordane	103		96		30-150	7		30	A
trans-Chlordane	82		84		30-150	2		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 07 Batch: WG1196837-2 WG1196837-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	115		104		30-150	B
Decachlorobiphenyl	165	Q	155	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	120		104		30-150	A
Decachlorobiphenyl	148		138		30-150	A

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195880-4 WG1195880-5 QC Sample: L1900707-03 Client ID: RB13_22-24													
2,4-D	ND	195	157J	81		152J	77		30-150	3		30	A
2,4,5-T	ND	195	148J	76		143J	73		30-150	3		30	A
2,4,5-TP (Silvex)	ND	195	146J	75		145J	74		30-150	1		30	A

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
DCAA	104		99		30-150	A
DCAA	93		88		30-150	B



METALS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-01

Date Collected: 01/07/19 10:45

Client ID: RB13_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8550		mg/kg	8.88	2.40	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Antimony, Total	0.915	J	mg/kg	4.44	0.338	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Arsenic, Total	4.10		mg/kg	0.888	0.185	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Barium, Total	42.8		mg/kg	0.888	0.154	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Beryllium, Total	0.302	J	mg/kg	0.444	0.029	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Cadmium, Total	0.178	J	mg/kg	0.888	0.087	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Calcium, Total	2430		mg/kg	8.88	3.11	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Chromium, Total	12.0		mg/kg	0.888	0.085	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Cobalt, Total	9.94		mg/kg	1.78	0.147	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Copper, Total	19.8		mg/kg	0.888	0.229	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Iron, Total	15000		mg/kg	4.44	0.802	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Lead, Total	76.2		mg/kg	4.44	0.238	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Magnesium, Total	2730		mg/kg	8.88	1.37	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Manganese, Total	256		mg/kg	0.888	0.141	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Mercury, Total	0.468		mg/kg	0.073	0.016	1	01/09/19 05:00	01/09/19 22:16	EPA 7471B	1,7471B	EA
Nickel, Total	11.7		mg/kg	2.22	0.215	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Potassium, Total	530		mg/kg	222	12.8	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Selenium, Total	0.249	J	mg/kg	1.78	0.229	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.888	0.251	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Sodium, Total	332		mg/kg	178	2.80	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.78	0.280	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Vanadium, Total	14.9		mg/kg	0.888	0.180	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
Zinc, Total	120		mg/kg	4.44	0.260	2	01/08/19 20:10	01/09/19 20:14	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.93	0.93	1		01/09/19 20:14	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-02

Date Collected: 01/07/19 11:00

Client ID: RB13_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9480		mg/kg	9.07	2.45	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.53	0.344	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Arsenic, Total	5.15		mg/kg	0.907	0.188	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Barium, Total	117		mg/kg	0.907	0.158	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Beryllium, Total	0.281	J	mg/kg	0.453	0.030	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.907	0.089	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Calcium, Total	3010		mg/kg	9.07	3.17	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Chromium, Total	22.4		mg/kg	0.907	0.087	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Cobalt, Total	7.46		mg/kg	1.81	0.150	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Copper, Total	14.0		mg/kg	0.907	0.234	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Iron, Total	18900		mg/kg	4.53	0.819	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Lead, Total	37.8		mg/kg	4.53	0.243	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Magnesium, Total	4360		mg/kg	9.07	1.40	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Manganese, Total	563		mg/kg	0.907	0.144	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Mercury, Total	0.066	J	mg/kg	0.075	0.016	1	01/09/19 05:00	01/09/19 22:18	EPA 7471B	1,7471B	EA
Nickel, Total	11.5		mg/kg	2.27	0.219	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Potassium, Total	516		mg/kg	227	13.0	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Selenium, Total	0.408	J	mg/kg	1.81	0.234	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.907	0.256	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Sodium, Total	152	J	mg/kg	181	2.86	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.81	0.286	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Vanadium, Total	27.1		mg/kg	0.907	0.184	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
Zinc, Total	56.0		mg/kg	4.53	0.266	2	01/08/19 20:10	01/09/19 20:18	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	22		mg/kg	0.95	0.95	1		01/09/19 20:18	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-03

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3160		mg/kg	9.49	2.56	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Antimony, Total	ND		mg/kg	4.74	0.360	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Arsenic, Total	0.987		mg/kg	0.949	0.197	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Barium, Total	9.92		mg/kg	0.949	0.165	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Beryllium, Total	0.133	J	mg/kg	0.474	0.031	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.949	0.093	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Calcium, Total	855		mg/kg	9.49	3.32	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Chromium, Total	6.86		mg/kg	0.949	0.091	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Cobalt, Total	2.34		mg/kg	1.90	0.157	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Copper, Total	4.71		mg/kg	0.949	0.245	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Iron, Total	6690		mg/kg	4.74	0.857	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Lead, Total	9.56		mg/kg	4.74	0.254	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Magnesium, Total	1420		mg/kg	9.49	1.46	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Manganese, Total	66.9		mg/kg	0.949	0.151	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.083	0.018	1	01/10/19 12:43	01/10/19 21:30	EPA 7471B	1,7471B	EA
Nickel, Total	5.44		mg/kg	2.37	0.230	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Potassium, Total	396		mg/kg	237	13.7	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.90	0.245	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.949	0.268	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Sodium, Total	50.1	J	mg/kg	190	2.99	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.90	0.299	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Vanadium, Total	8.76		mg/kg	0.949	0.192	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
Zinc, Total	14.7		mg/kg	4.74	0.278	2	01/10/19 12:30	01/10/19 20:02	EPA 3050B	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	6.9		mg/kg	0.96	0.96	1		01/11/19 08:49	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04

Date Collected: 01/07/19 10:55

Client ID: RB13_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4760		mg/kg	8.49	2.29	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.24	0.322	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Arsenic, Total	0.603	J	mg/kg	0.849	0.176	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Barium, Total	35.7		mg/kg	0.849	0.148	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.424	0.028	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.849	0.083	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Calcium, Total	23400		mg/kg	8.49	2.97	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Chromium, Total	7.04		mg/kg	0.849	0.082	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Cobalt, Total	4.64		mg/kg	1.70	0.141	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Copper, Total	13.8		mg/kg	0.849	0.219	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Iron, Total	9510		mg/kg	4.24	0.766	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Lead, Total	2.76	J	mg/kg	4.24	0.228	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Magnesium, Total	16800		mg/kg	8.49	1.31	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Manganese, Total	179		mg/kg	0.849	0.135	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.072	0.015	1	01/09/19 05:00	01/09/19 22:21	EPA 7471B	1,7471B	EA
Nickel, Total	7.42		mg/kg	2.12	0.205	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Potassium, Total	1820		mg/kg	212	12.2	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Selenium, Total	0.518	J	mg/kg	1.70	0.219	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.849	0.240	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Sodium, Total	236		mg/kg	170	2.67	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.70	0.267	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Vanadium, Total	14.8		mg/kg	0.849	0.172	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
Zinc, Total	26.0		mg/kg	4.24	0.249	2	01/08/19 20:10	01/09/19 20:26	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.0		mg/kg	0.90	0.90	1		01/09/19 20:26	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-05

Date Collected: 01/07/19 12:20

Client ID: RB14_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7870		mg/kg	9.15	2.47	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Antimony, Total	0.348	J	mg/kg	4.57	0.348	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Arsenic, Total	4.92		mg/kg	0.915	0.190	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Barium, Total	61.0		mg/kg	0.915	0.159	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Beryllium, Total	0.183	J	mg/kg	0.457	0.030	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Cadmium, Total	0.183	J	mg/kg	0.915	0.090	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Calcium, Total	33100		mg/kg	9.15	3.20	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Chromium, Total	18.9		mg/kg	0.915	0.088	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Cobalt, Total	5.76		mg/kg	1.83	0.152	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Copper, Total	24.4		mg/kg	0.915	0.236	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Iron, Total	13800		mg/kg	4.57	0.826	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Lead, Total	169		mg/kg	4.57	0.245	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Magnesium, Total	2710		mg/kg	9.15	1.41	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Manganese, Total	242		mg/kg	0.915	0.145	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Mercury, Total	0.186		mg/kg	0.075	0.016	1	01/09/19 05:00	01/09/19 22:23	EPA 7471B	1,7471B	EA
Nickel, Total	11.0		mg/kg	2.29	0.221	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Potassium, Total	1000		mg/kg	229	13.2	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Selenium, Total	0.430	J	mg/kg	1.83	0.236	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.915	0.259	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Sodium, Total	272		mg/kg	183	2.88	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.83	0.288	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Vanadium, Total	16.1		mg/kg	0.915	0.186	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
Zinc, Total	119		mg/kg	4.57	0.268	2	01/08/19 20:10	01/09/19 20:30	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	19	J	mg/kg	0.93	0.93	1		01/09/19 20:30	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-06

Date Collected: 01/07/19 12:25

Client ID: RB14_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3360		mg/kg	9.00	2.43	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.50	0.342	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Arsenic, Total	0.846	J	mg/kg	0.900	0.187	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Barium, Total	11.5		mg/kg	0.900	0.157	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Beryllium, Total	0.126	J	mg/kg	0.450	0.030	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.900	0.088	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Calcium, Total	572		mg/kg	9.00	3.15	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Chromium, Total	7.34		mg/kg	0.900	0.086	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Cobalt, Total	2.85		mg/kg	1.80	0.149	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Copper, Total	4.34		mg/kg	0.900	0.232	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Iron, Total	7990		mg/kg	4.50	0.813	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Lead, Total	5.19		mg/kg	4.50	0.241	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Magnesium, Total	1340		mg/kg	9.00	1.39	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Manganese, Total	171		mg/kg	0.900	0.143	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.073	0.016	1	01/09/19 05:00	01/09/19 22:28	EPA 7471B	1,7471B	EA
Nickel, Total	5.40		mg/kg	2.25	0.218	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Potassium, Total	321		mg/kg	225	13.0	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.80	0.232	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.900	0.255	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Sodium, Total	35.6	J	mg/kg	180	2.84	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.80	0.284	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Vanadium, Total	10.3		mg/kg	0.900	0.183	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
Zinc, Total	14.8		mg/kg	4.50	0.264	2	01/08/19 20:10	01/09/19 20:34	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.3		mg/kg	0.93	0.93	1		01/09/19 20:34	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-07

Date Collected: 01/07/19 12:30

Client ID: RB14_23-25

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4380		mg/kg	9.26	2.50	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.63	0.352	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Arsenic, Total	0.852	J	mg/kg	0.926	0.193	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Barium, Total	12.2		mg/kg	0.926	0.161	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Beryllium, Total	0.139	J	mg/kg	0.463	0.031	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.926	0.091	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Calcium, Total	414		mg/kg	9.26	3.24	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Chromium, Total	8.44		mg/kg	0.926	0.089	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Cobalt, Total	4.06		mg/kg	1.85	0.154	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Copper, Total	7.55		mg/kg	0.926	0.239	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Iron, Total	9340		mg/kg	4.63	0.836	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Lead, Total	11.3		mg/kg	4.63	0.248	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Magnesium, Total	1650		mg/kg	9.26	1.43	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Manganese, Total	78.8		mg/kg	0.926	0.147	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.076	0.016	1	01/09/19 05:00	01/09/19 22:30	EPA 7471B	1,7471B	EA
Nickel, Total	6.96		mg/kg	2.32	0.224	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Potassium, Total	493		mg/kg	232	13.3	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.85	0.239	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.926	0.262	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Sodium, Total	55.6	J	mg/kg	185	2.92	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.85	0.292	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Vanadium, Total	11.1		mg/kg	0.926	0.188	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
Zinc, Total	16.9		mg/kg	4.63	0.271	2	01/08/19 20:10	01/09/19 20:39	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	8.4		mg/kg	0.97	0.97	1		01/09/19 20:39	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-08

Date Collected: 01/07/19 12:35

Client ID: RB14_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7220		mg/kg	8.51	2.30	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Antimony, Total	3.31	J	mg/kg	4.26	0.324	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Arsenic, Total	0.613	J	mg/kg	0.851	0.177	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Barium, Total	46.7		mg/kg	0.851	0.148	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.426	0.028	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.851	0.083	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Calcium, Total	10400		mg/kg	8.51	2.98	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Chromium, Total	21.4		mg/kg	0.851	0.082	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Cobalt, Total	11.2		mg/kg	1.70	0.141	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Copper, Total	9.33		mg/kg	0.851	0.220	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Iron, Total	11600		mg/kg	4.26	0.769	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Lead, Total	2.40	J	mg/kg	4.26	0.228	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Magnesium, Total	10500		mg/kg	8.51	1.31	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Manganese, Total	140		mg/kg	0.851	0.135	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.071	0.015	1	01/09/19 05:00	01/09/19 22:31	EPA 7471B	1,7471B	EA
Nickel, Total	17.0		mg/kg	2.13	0.206	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Potassium, Total	2480		mg/kg	213	12.3	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.70	0.220	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.851	0.241	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Sodium, Total	321		mg/kg	170	2.68	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.70	0.268	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Vanadium, Total	26.4		mg/kg	0.851	0.173	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
Zinc, Total	32.0		mg/kg	4.26	0.249	2	01/08/19 20:10	01/09/19 20:43	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	21		mg/kg	0.89	0.89	1		01/09/19 20:43	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-09

Date Collected: 01/07/19 00:00

Client ID: SODUP04_010719

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4800		mg/kg	9.28	2.50	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.64	0.352	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Arsenic, Total	0.835	J	mg/kg	0.928	0.193	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Barium, Total	13.2		mg/kg	0.928	0.161	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Beryllium, Total	0.167	J	mg/kg	0.464	0.031	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.928	0.091	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Calcium, Total	482		mg/kg	9.28	3.25	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Chromium, Total	10.2		mg/kg	0.928	0.089	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Cobalt, Total	4.53		mg/kg	1.86	0.154	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Copper, Total	8.60		mg/kg	0.928	0.239	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Iron, Total	9820		mg/kg	4.64	0.838	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Lead, Total	7.53		mg/kg	4.64	0.249	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Magnesium, Total	1850		mg/kg	9.28	1.43	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Manganese, Total	159		mg/kg	0.928	0.148	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.075	0.016	1	01/09/19 05:00	01/09/19 22:33	EPA 7471B	1,7471B	EA
Nickel, Total	8.05		mg/kg	2.32	0.224	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Potassium, Total	487		mg/kg	232	13.4	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.86	0.239	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.928	0.262	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Sodium, Total	56.5	J	mg/kg	186	2.92	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.86	0.292	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Vanadium, Total	12.7		mg/kg	0.928	0.188	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
Zinc, Total	19.7		mg/kg	4.64	0.272	2	01/08/19 20:10	01/09/19 20:47	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	10		mg/kg	0.96	0.96	1		01/09/19 20:47	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.100	0.032	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Antimony, Total	0.009	J	mg/l	0.050	0.007	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Arsenic, Total	ND		mg/l	0.005	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Barium, Total	0.002	J	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Beryllium, Total	ND		mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Cadmium, Total	ND		mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Calcium, Total	ND		mg/l	0.100	0.035	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Chromium, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Cobalt, Total	ND		mg/l	0.020	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Copper, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Iron, Total	ND		mg/l	0.050	0.009	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Lead, Total	ND		mg/l	0.010	0.003	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Magnesium, Total	ND		mg/l	0.100	0.015	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Manganese, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/08/19 10:55	01/08/19 18:43	EPA 7470A	1,7470A	MG
Nickel, Total	ND		mg/l	0.025	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Potassium, Total	ND		mg/l	2.50	0.237	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Selenium, Total	ND		mg/l	0.010	0.004	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Silver, Total	ND		mg/l	0.007	0.003	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Sodium, Total	ND		mg/l	2.00	0.120	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Thallium, Total	ND		mg/l	0.020	0.003	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Vanadium, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
Zinc, Total	ND		mg/l	0.050	0.002	1	01/09/19 13:02	01/09/19 21:48	EPA 3005A	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/09/19 21:48	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 11 Batch: WG1195683-1									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	01/08/19 10:55	01/08/19 18:06	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
Total Metals - Mansfield Lab for sample(s): 01-02,04-09 Batch: WG1195823-1										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Antimony, Total	ND	mg/kg	2.00	0.152	1	01/08/19 20:10	01/09/19 16:17	1,6010D	AB	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Barium, Total	ND	mg/kg	0.400	0.070	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Calcium, Total	ND	mg/kg	4.00	1.40	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Chromium, Total	ND	mg/kg	0.400	0.038	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Cobalt, Total	ND	mg/kg	0.800	0.066	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Copper, Total	ND	mg/kg	0.400	0.103	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Iron, Total	ND	mg/kg	2.00	0.361	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Lead, Total	ND	mg/kg	2.00	0.107	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Manganese, Total	ND	mg/kg	0.400	0.064	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Nickel, Total	ND	mg/kg	1.00	0.097	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Potassium, Total	ND	mg/kg	100	5.76	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Selenium, Total	0.128	J	mg/kg	0.800	0.103	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB
Silver, Total	ND	mg/kg	0.400	0.113	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Sodium, Total	1.64	J	mg/kg	80.0	1.26	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB
Thallium, Total	ND	mg/kg	0.800	0.126	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	
Zinc, Total	ND	mg/kg	2.00	0.117	1	01/08/19 20:10	01/09/19 14:12	1,6010D	AB	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02,04-09 Batch: WG1195894-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	01/09/19 05:00	01/09/19 21:55	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 11 Batch: WG1196054-1									
Aluminum, Total	ND	mg/l	0.100	0.032	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Antimony, Total	ND	mg/l	0.050	0.007	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Arsenic, Total	ND	mg/l	0.005	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Barium, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Beryllium, Total	ND	mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Cadmium, Total	ND	mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Calcium, Total	ND	mg/l	0.100	0.035	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Chromium, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Cobalt, Total	ND	mg/l	0.020	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Copper, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Iron, Total	ND	mg/l	0.050	0.009	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Lead, Total	ND	mg/l	0.010	0.003	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Magnesium, Total	ND	mg/l	0.100	0.015	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Manganese, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Nickel, Total	ND	mg/l	0.025	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Potassium, Total	ND	mg/l	2.50	0.237	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Selenium, Total	ND	mg/l	0.010	0.004	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Silver, Total	ND	mg/l	0.007	0.003	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Sodium, Total	ND	mg/l	2.00	0.120	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Thallium, Total	ND	mg/l	0.020	0.003	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Vanadium, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis Batch Quality Control

Zinc, Total	ND	mg/l	0.050	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
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Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03 Batch: WG1196430-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	01/10/19 12:43	01/10/19 21:22	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03 Batch: WG1196431-1									
Aluminum, Total	ND	mg/kg	4.00	1.08	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Antimony, Total	ND	mg/kg	2.00	0.152	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Arsenic, Total	ND	mg/kg	0.400	0.083	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Barium, Total	ND	mg/kg	0.400	0.070	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Beryllium, Total	ND	mg/kg	0.200	0.013	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Cadmium, Total	ND	mg/kg	0.400	0.039	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Calcium, Total	ND	mg/kg	4.00	1.40	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Chromium, Total	ND	mg/kg	0.400	0.038	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Cobalt, Total	ND	mg/kg	0.800	0.066	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Copper, Total	ND	mg/kg	0.400	0.103	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Iron, Total	ND	mg/kg	2.00	0.361	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Lead, Total	ND	mg/kg	2.00	0.107	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Magnesium, Total	ND	mg/kg	4.00	0.616	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Manganese, Total	ND	mg/kg	0.400	0.064	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Nickel, Total	ND	mg/kg	1.00	0.097	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Potassium, Total	ND	mg/kg	100	5.76	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Selenium, Total	ND	mg/kg	0.800	0.103	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Silver, Total	ND	mg/kg	0.400	0.113	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Sodium, Total	ND	mg/kg	80.0	1.26	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19

Method Blank Analysis Batch Quality Control

Thallium, Total	ND	mg/kg	0.800	0.126	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Vanadium, Total	ND	mg/kg	0.400	0.081	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC
Zinc, Total	ND	mg/kg	2.00	0.117	1	01/10/19 12:30	01/10/19 19:33	1,6010D	MC

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1195683-2								
Mercury, Total	89		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 Batch: WG1195823-2 SRM Lot Number: D101-540					
Aluminum, Total	74	-	50-151	-	
Antimony, Total	162	-	3-196	-	
Arsenic, Total	106	-	83-117	-	
Barium, Total	97	-	83-118	-	
Beryllium, Total	94	-	83-117	-	
Cadmium, Total	96	-	83-117	-	
Calcium, Total	94	-	81-119	-	
Chromium, Total	94	-	81-118	-	
Cobalt, Total	95	-	84-116	-	
Copper, Total	96	-	83-116	-	
Iron, Total	98	-	62-138	-	
Lead, Total	95	-	83-117	-	
Magnesium, Total	84	-	76-124	-	
Manganese, Total	95	-	82-118	-	
Nickel, Total	94	-	82-117	-	
Potassium, Total	87	-	71-130	-	
Selenium, Total	103	-	79-121	-	
Silver, Total	100	-	80-120	-	
Sodium, Total	100	-	72-127	-	
Thallium, Total	95	-	81-119	-	
Vanadium, Total	96	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 Batch: WG1195823-2 SRM Lot Number: D101-540					
Zinc, Total	97	-	81-119	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 Batch: WG1195894-2 SRM Lot Number: D101-540					
Mercury, Total	77	-	65-135	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1196054-2					
Aluminum, Total	96	-	80-120	-	
Antimony, Total	95	-	80-120	-	
Arsenic, Total	106	-	80-120	-	
Barium, Total	93	-	80-120	-	
Beryllium, Total	93	-	80-120	-	
Cadmium, Total	102	-	80-120	-	
Calcium, Total	98	-	80-120	-	
Chromium, Total	95	-	80-120	-	
Cobalt, Total	94	-	80-120	-	
Copper, Total	94	-	80-120	-	
Iron, Total	98	-	80-120	-	
Lead, Total	100	-	80-120	-	
Magnesium, Total	101	-	80-120	-	
Manganese, Total	91	-	80-120	-	
Nickel, Total	95	-	80-120	-	
Potassium, Total	94	-	80-120	-	
Selenium, Total	114	-	80-120	-	
Silver, Total	101	-	80-120	-	
Sodium, Total	96	-	80-120	-	
Thallium, Total	102	-	80-120	-	
Vanadium, Total	98	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 Batch: WG1196054-2					
Zinc, Total	101	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1196430-2 SRM Lot Number: D101-540					
Mercury, Total	85	-	65-135	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1196431-2 SRM Lot Number: D101-540					
Aluminum, Total	69	-	50-151	-	
Antimony, Total	141	-	3-196	-	
Arsenic, Total	94	-	83-117	-	
Barium, Total	90	-	83-118	-	
Beryllium, Total	92	-	83-117	-	
Cadmium, Total	89	-	83-117	-	
Calcium, Total	90	-	81-119	-	
Chromium, Total	90	-	81-118	-	
Cobalt, Total	90	-	84-116	-	
Copper, Total	92	-	83-116	-	
Iron, Total	86	-	62-138	-	
Lead, Total	86	-	83-117	-	
Magnesium, Total	85	-	76-124	-	
Manganese, Total	87	-	82-118	-	
Nickel, Total	90	-	82-117	-	
Potassium, Total	83	-	71-130	-	
Selenium, Total	92	-	79-121	-	
Silver, Total	91	-	80-120	-	
Sodium, Total	97	-	72-127	-	
Thallium, Total	90	-	81-119	-	
Vanadium, Total	91	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 Batch: WG1196431-2 SRM Lot Number: D101-540					
Zinc, Total	90	-	81-119	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1195683-3 QC Sample: L1900487-09 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00499	100		-	-		75-125	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195823-3 QC Sample: L1900622-01 Client ID: MS Sample									
Aluminum, Total	3970	181	4480	281	Q	-	75-125	-	20
Antimony, Total	1.47J	45.3	41.0	90		-	75-125	-	20
Arsenic, Total	5.00	10.9	16.1	102		-	75-125	-	20
Barium, Total	211	181	407	108		-	75-125	-	20
Beryllium, Total	0.174J	4.53	3.90	86		-	75-125	-	20
Cadmium, Total	1.14	4.62	5.02	84		-	75-125	-	20
Calcium, Total	45300	906	43200	0	Q	-	75-125	-	20
Chromium, Total	13.3	18.1	32.7	107		-	75-125	-	20
Cobalt, Total	3.41	45.3	41.0	83		-	75-125	-	20
Copper, Total	13.4	22.6	33.8	90		-	75-125	-	20
Iron, Total	8430	90.6	7600	0	Q	-	75-125	-	20
Lead, Total	1890	46.2	1200	0	Q	-	75-125	-	20
Magnesium, Total	1820	906	2640	90		-	75-125	-	20
Manganese, Total	216	45.3	230	31	Q	-	75-125	-	20
Nickel, Total	10.3	45.3	46.5	80		-	75-125	-	20
Potassium, Total	878	906	1780	100		-	75-125	-	20
Selenium, Total	0.432J	10.9	11.2	103		-	75-125	-	20
Silver, Total	ND	27.2	29.0	107		-	75-125	-	20
Sodium, Total	605	906	1430	91		-	75-125	-	20
Thallium, Total	ND	10.9	7.89	72	Q	-	75-125	-	20
Vanadium, Total	20.6	45.3	57.1	80		-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195823-3 QC Sample: L1900622-01 Client ID: MS Sample									
Zinc, Total	669	45.3	575	0	Q	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195894-3 QC Sample: L1900686-14 Client ID: MS Sample									
Mercury, Total	ND	0.139	0.150	108	-	-	80-120	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-3 QC Sample: L1900487-09 Client ID: MS Sample									
Aluminum, Total	ND	2	1.95	98	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.473	95	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.125	104	-	-	75-125	-	20
Barium, Total	ND	2	1.90	95	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.048	96	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.052	102	-	-	75-125	-	20
Calcium, Total	0.066J	10	9.95	100	-	-	75-125	-	20
Chromium, Total	ND	0.2	0.190	95	-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.468	94	-	-	75-125	-	20
Copper, Total	ND	0.25	0.234	94	-	-	75-125	-	20
Iron, Total	0.020J	1	1.02	102	-	-	75-125	-	20
Lead, Total	ND	0.51	0.508	100	-	-	75-125	-	20
Magnesium, Total	0.033J	10	10.5	105	-	-	75-125	-	20
Manganese, Total	ND	0.5	0.460	92	-	-	75-125	-	20
Nickel, Total	ND	0.5	0.472	94	-	-	75-125	-	20
Potassium, Total	ND	10	9.69	97	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.134	112	-	-	75-125	-	20
Silver, Total	ND	0.05	0.050	100	-	-	75-125	-	20
Sodium, Total	0.191J	10	9.93	99	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.120	100	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.482	96	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-3 QC Sample: L1900487-09 Client ID: MS Sample									
Zinc, Total	0.007J	0.5	0.508	102	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1196430-3 WG1196430-4 QC Sample: L1900707-03 Client ID: RB13_22-24									
Mercury, Total	ND	0.162	0.174	107	0.186	110	80-120	7	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits			
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1196431-3 WG1196431-4 QC Sample: L1900707-03 Client ID: RB13_22-24												
Aluminum, Total	3160	186	3940	420	Q	5820	1450	Q	75-125	39	Q	20
Antimony, Total	ND	46.5	40.5	87		38.2	84		75-125	6		20
Arsenic, Total	0.987	11.2	12.3	101		12.1	101		75-125	2		20
Barium, Total	9.92	186	183	93		184	95		75-125	1		20
Beryllium, Total	0.133J	4.65	4.65	100		4.64	102		75-125	0		20
Cadmium, Total	ND	4.74	4.54	96		4.39	94		75-125	3		20
Calcium, Total	855	930	1700	91		1830	107		75-125	7		20
Chromium, Total	6.86	18.6	23.8	91		27.1	111		75-125	13		20
Cobalt, Total	2.34	46.5	43.8	89		42.8	88		75-125	2		20
Copper, Total	4.71	23.2	26.5	94		28.8	105		75-125	8		20
Iron, Total	6690	93	7210	559	Q	9290	2840	Q	75-125	25	Q	20
Lead, Total	9.56	47.4	52.7	91		53.3	94		75-125	1		20
Magnesium, Total	1420	930	2420	108		2910	163	Q	75-125	18		20
Manganese, Total	66.9	46.5	113	99		136	151	Q	75-125	18		20
Nickel, Total	5.44	46.5	47.2	90		47.5	92		75-125	1		20
Potassium, Total	396	930	1330	100		1550	126	Q	75-125	15		20
Selenium, Total	ND	11.2	11.0	99		10.4	95		75-125	6		20
Silver, Total	ND	27.9	29.4	105		29.5	108		75-125	0		20
Sodium, Total	50.1J	930	996	107		991	108		75-125	1		20
Thallium, Total	ND	11.2	9.93	89		9.46	86		75-125	5		20
Vanadium, Total	8.76	46.5	53.6	96		55.9	103		75-125	4		20



Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03 QC Batch ID: WG1196431-3 WG1196431-4 QC Sample: L1900707-03 Client ID: RB13_22-24									
Zinc, Total	14.7	46.5	59.4	96	61.7	103	75-125	4	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1195683-4 QC Sample: L1900487-09 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195823-4 QC Sample: L1900622-01 Client ID: DUP Sample						
Lead, Total	1890	656	mg/kg	97	Q	20
Total Metals - Mansfield Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195894-4 QC Sample: L1900686-14 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-4 QC Sample: L1900487-09 Client ID: DUP Sample					
Aluminum, Total	ND	ND	mg/l	NC	20
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	ND	0.003J	mg/l	NC	20
Barium, Total	ND	0.002J	mg/l	NC	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	0.066J	0.065J	mg/l	NC	20
Chromium, Total	ND	ND	mg/l	NC	20
Cobalt, Total	ND	ND	mg/l	NC	20
Copper, Total	ND	ND	mg/l	NC	20
Lead, Total	ND	ND	mg/l	NC	20
Magnesium, Total	0.033J	0.028J	mg/l	NC	20
Manganese, Total	ND	ND	mg/l	NC	20
Nickel, Total	ND	ND	mg/l	NC	20
Potassium, Total	ND	ND	mg/l	NC	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	0.191J	0.289J	mg/l	NC	20
Thallium, Total	ND	ND	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-4 QC Sample: L1900487-09 Client ID: DUP Sample					
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.007J	0.006J	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 11 QC Batch ID: WG1196054-4 QC Sample: L1900487-09 Client ID: DUP Sample					
Iron, Total	0.020J	0.015J	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-01

Date Collected: 01/07/19 10:45

Client ID: RB13_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.6		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/08/19 10:15	01/09/19 11:33	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.934	0.187	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-02

Date Collected: 01/07/19 11:00

Client ID: RB13_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.0		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	01/08/19 10:15	01/09/19 11:34	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.952	0.190	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-03

Date Collected: 01/07/19 10:50

Client ID: RB13_22-24

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.0		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	01/08/19 10:15	01/09/19 11:35	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.964	0.193	1	01/10/19 15:30	01/11/19 08:49	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-04

Date Collected: 01/07/19 10:55

Client ID: RB13_33-35

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.7		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	01/08/19 10:15	01/09/19 11:39	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.902	0.180	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-05

Date Collected: 01/07/19 12:20

Client ID: RB14_0-2

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.8		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	01/08/19 10:15	01/09/19 11:40	1,9010C/9012B	LH
Chromium, Hexavalent	0.221	J	mg/kg	0.932	0.186	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-06

Date Collected: 01/07/19 12:25

Client ID: RB14_18-20

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.8		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.24	1	01/08/19 10:15	01/09/19 11:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.932	0.186	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-07
Client ID: RB14_23-25
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:30
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.3		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.26	1	01/08/19 10:15	01/09/19 11:44	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.972	0.194	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

SAMPLE RESULTS

Lab ID: L1900707-08
Client ID: RB14_33-35
Sample Location: BRONX, NY

Date Collected: 01/07/19 12:35
Date Received: 01/07/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.2		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/08/19 10:15	01/09/19 11:45	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.887	0.177	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-09

Date Collected: 01/07/19 00:00

Client ID: SODUP04_010719

Date Received: 01/07/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.3		%	0.100	NA	1	-	01/08/19 12:10	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	01/08/19 10:15	01/09/19 11:46	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.960	0.192	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900707**Project Number:** 170487001**Report Date:** 01/14/19**SAMPLE RESULTS**

Lab ID: L1900707-11
 Client ID: SOFB03_010719
 Sample Location: BRONX, NY

Date Collected: 01/07/19 14:00
 Date Received: 01/07/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/09/19 14:35	01/10/19 13:55	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/08/19 03:45	01/08/19 04:28	1,7196A	MA



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1195574-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/08/19 03:45	01/08/19 04:21	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1195617-1										
Cyanide, Total	ND		mg/kg	0.91	0.19	1	01/08/19 10:15	01/09/19 11:10	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-02,04-09 Batch: WG1195861-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	01/08/19 18:15	01/09/19 09:14	1,7196A	NH
General Chemistry - Westborough Lab for sample(s): 11 Batch: WG1196095-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/09/19 02:35	01/10/19 13:19	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 03 Batch: WG1196593-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	01/10/19 15:30	01/11/19 08:49	1,7196A	NH

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1195574-2								
Chromium, Hexavalent	92		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1195617-2 WG1195617-3								
Cyanide, Total	60	Q	62	Q	80-120	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-09 Batch: WG1195861-2								
Chromium, Hexavalent	99		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 11 Batch: WG1196095-2 WG1196095-3								
Cyanide, Total	103		101		85-115	2		20
General Chemistry - Westborough Lab Associated sample(s): 03 Batch: WG1196593-2								
Chromium, Hexavalent	95		-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1195574-4 QC Sample: L1900707-11 Client ID: SOFB03_010719												
Chromium, Hexavalent	ND	0.1	0.097	97	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195617-4 WG1195617-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
Cyanide, Total	ND	12	11	92	11	93	93	75-125	0	0	0	35
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195861-4 QC Sample: L1900707-04 Client ID: RB13_33-35												
Chromium, Hexavalent	ND	1140	1230	108	-	-	-	-	75-125	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1196095-4 WG1196095-5 QC Sample: L1900885-11 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.197	98	0.194	97	97	80-120	2	2	2	20
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG1196593-4 WG1196593-5 QC Sample: L1900707-03 Client ID: RB13_22-24												
Chromium, Hexavalent	ND	1180	1130	95	1150	94	94	75-125	2	2	2	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900707

Report Date: 01/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 11 QC Batch ID: WG1195574-3 QC Sample: L1900707-11 Client ID: SOFB03_010719						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1195696-1 QC Sample: L1900707-03 Client ID: RB13_22-24						
Solids, Total	83.0	78.4	%	6		20
General Chemistry - Westborough Lab Associated sample(s): 01-02,04-09 QC Batch ID: WG1195861-6 QC Sample: L1900707-04 Client ID: RB13_33-35						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 03 QC Batch ID: WG1196593-7 QC Sample: L1900707-03 Client ID: RB13_22-24						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01141921:10
Lab Number: L1900707
Report Date: 01/14/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-01A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-01B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-01C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-01D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-01F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-01G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-02A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-02B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-02C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-02D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-02F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-02G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900707

Project Number: 170487001

Report Date: 01/14/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-03A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-03A1	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-03A2	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-03B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03B1	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03B2	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03C1	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03C2	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-03D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-03D1	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-03D2	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-03E1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-03E2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-03F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-03F1	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-03F2	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-03G	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-03G1	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-03G2	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-04A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-04B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-04C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-04D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-04F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-04G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-05A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-05B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-05C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-05D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-05F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-05G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

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Lab Number: L1900707

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Report Date: 01/14/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-06A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-06B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-06C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-06D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-06F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-06G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-07A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-07B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-07C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-07D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-07E	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),TS(7),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-08A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-08B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-08C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-08D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-08F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-08G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-09A	Vial MeOH preserved	A	NA		2.2	Y	Absent		NYTCL-8260HLW(14)
L1900707-09B	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-09C	Vial water preserved	A	NA		2.2	Y	Absent	08-JAN-19 02:53	NYTCL-8260HLW(14)
L1900707-09D	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1900707-09E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-09F	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-09G	Glass 500ml/16oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900707-10A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-10B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-11A	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-11B	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-11C	Vial HCl preserved	A	NA		2.2	Y	Absent		NYTCL-8260(14)
L1900707-11D	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900707-11E	Plastic 250ml NaOH preserved	A	>12	>12	2.2	Y	Absent		TCN-9010(14)
L1900707-11F	Plastic 500ml unpreserved	A	NA		2.2	Y	Absent		HEXCR-7196(1)
L1900707-11G	Amber 120ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8081(7)
L1900707-11H	Amber 120ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8081(7)
L1900707-11I	Amber 120ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8082-LVI(7)
L1900707-11J	Amber 120ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8082-LVI(7)
L1900707-11K	Amber 250ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900707-11L	Amber 250ml unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1900707-11M	Amber 1000ml unpreserved	A	NA		2.2	Y	Absent		HERB-APA(7)
L1900707-11N	Amber 1000ml unpreserved	B	7	7	3.8	Y	Absent		HERB-APA(7)

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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

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Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900707
Report Date: 01/14/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #										
		1 of 2	1/7/19	L1900707										
Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3286	Project Information Project Name: Gerard Ave. + E. 146th St. Project Location: Bronx NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input checked="" type="checkbox"/> ASP-A No: 30 <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #									
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:										
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.		Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		ANALYSIS Part 375/TCL VOCs Part 375/TCL SVOCs Part 375/TCL PCBs Pesticides Herbicides TAL Metals Hexavalent Chromium Total Cyanide	Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)									
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide	Total Bottle
00707-01	RB13-0-2	1/7/19	1045	Soil	JL	X	X	X	X	X	X	X	X	
-02	RB13-18-20		1100		JL									
-03	RB13-22-24		1050		JL									
-04	RB13-33-35		1055		JL									
-05	RB14-0-2		1220		JL									
-06	RB14-18-20		1225		JL									
-07	RB14-23-25		1230		JL									
-08	RB14-33-35		1235		JL									
-09	SODUP04-010719		-		JL									
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative		Relinquished By: Date/Time Received By: Date/Time		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)				
						[Signature] 1/7/19 1515		[Signature] 1/7 1515						
						[Signature] 1/7/19 1100		[Signature] 1/7/19 1400						
						[Signature] 1/7/19 2225		[Signature] 1/7/19 2225						

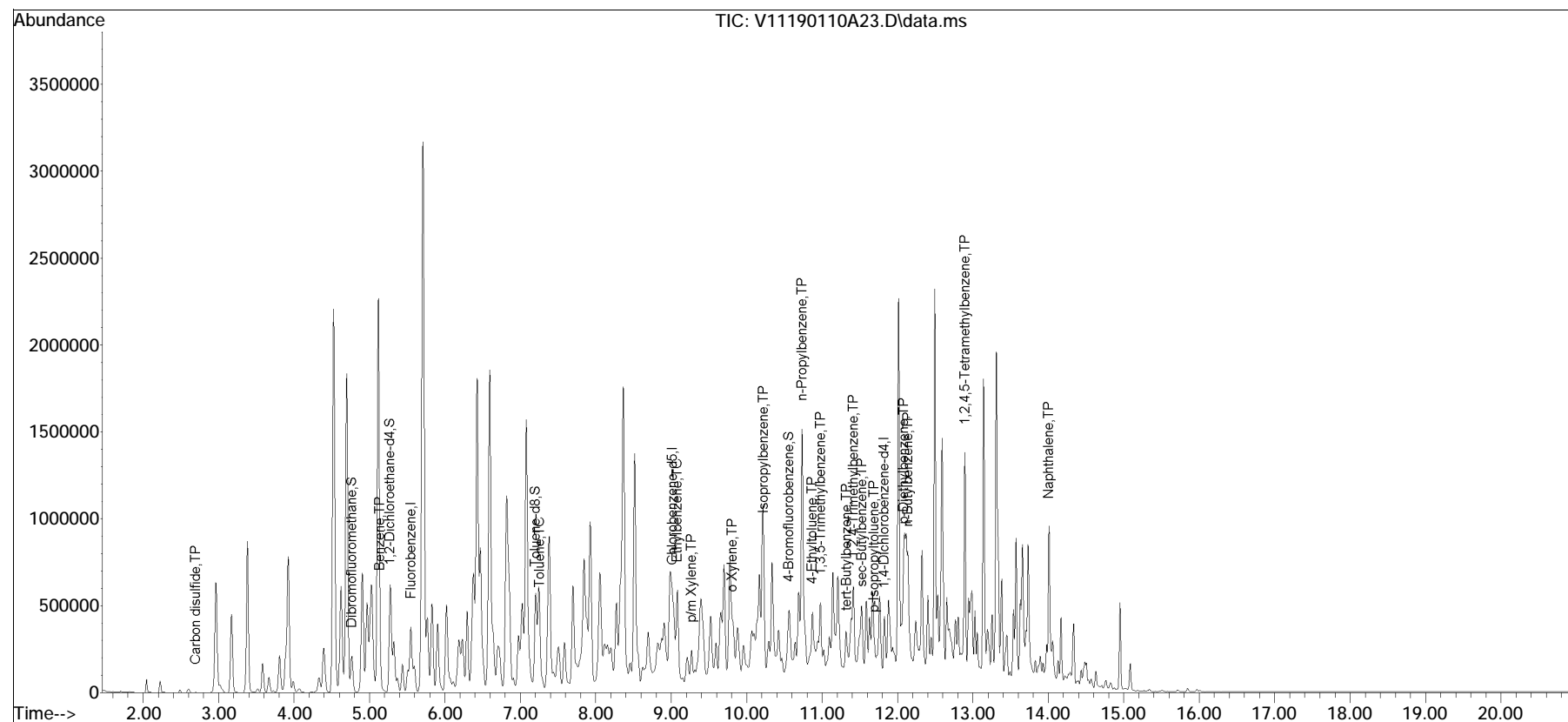
 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab																																																		
		2 of 2	1/7/19	ALPHA Job # L1900707																																																	
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information		Deliverables	Billing Information																																																
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Project Manager: Julia Leung ALPHAQuote #:		Regulatory Requirement		Disposal Site Information																																																	
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																	
These samples have been previously analyzed by Alpha <input type="checkbox"/>		ANALYSIS		Sample Filtration																																																	
Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.		<table border="1" style="width:100%; border-collapse: collapse; font-size: x-small;"> <tr> <th>Part 375/TCL VOCs</th> <th>Part 375/TCL SVOCs</th> <th>Part 375/TCL PCBs</th> <th>Pesticides</th> <th>Herbicides</th> <th>TAL Metals</th> <th>Hexavalent Chromium</th> <th>Total Cyanide</th> </tr> <tr> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> </table>		Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide	X								X	X	X	X	X	X	X	X	<input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)																									
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X	X	X	X	X	X	X	X																																														
<table border="1" style="width:100%; border-collapse: collapse; font-size: x-small;"> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2">Part 375/TCL VOCs</th> <th rowspan="2">Part 375/TCL SVOCs</th> <th rowspan="2">Part 375/TCL PCBs</th> <th rowspan="2">Pesticides</th> <th rowspan="2">Herbicides</th> <th rowspan="2">TAL Metals</th> <th rowspan="2">Hexavalent Chromium</th> <th rowspan="2">Total Cyanide</th> <th rowspan="2">Sample Specific Comments</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> <tr> <td>00707 -10</td> <td>SOTB06-010719</td> <td>1/7/19</td> <td>-</td> <td>AQ</td> <td>JL</td> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-11</td> <td>SGFB03-010719</td> <td style="text-align: center;">↓</td> <td>1400</td> <td>AQ</td> <td>JD</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td></td> </tr> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide	Sample Specific Comments	Date	Time	00707 -10	SOTB06-010719	1/7/19	-	AQ	JL	X									-11	SGFB03-010719	↓	1400	AQ	JD	X	X	X	X	X	X	X	X		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)
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-11	SGFB03-010719	↓	1400	AQ	JD	X	X	X	X	X	X	X	X																																								
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D. Santos	1/7/19 2225	Windy Murray	1/7/19 2225																																																		

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2019\190110A\
 Data File : V11190110A23.D
 Acq On : 10 Jan 2019 04:21 pm
 Operator : VOA111:AD
 Sample : 11900707-03D,31H,6.00,5,0.020,,a
 Misc : WG1196507,ICAL15386
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jan 10 17:04:10 2019
 Quant Method : I:\VOLATILES\VOA111\2019\190110A\V111_190108N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Jan 09 10:10:31 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90110A\V11190110A01.D•

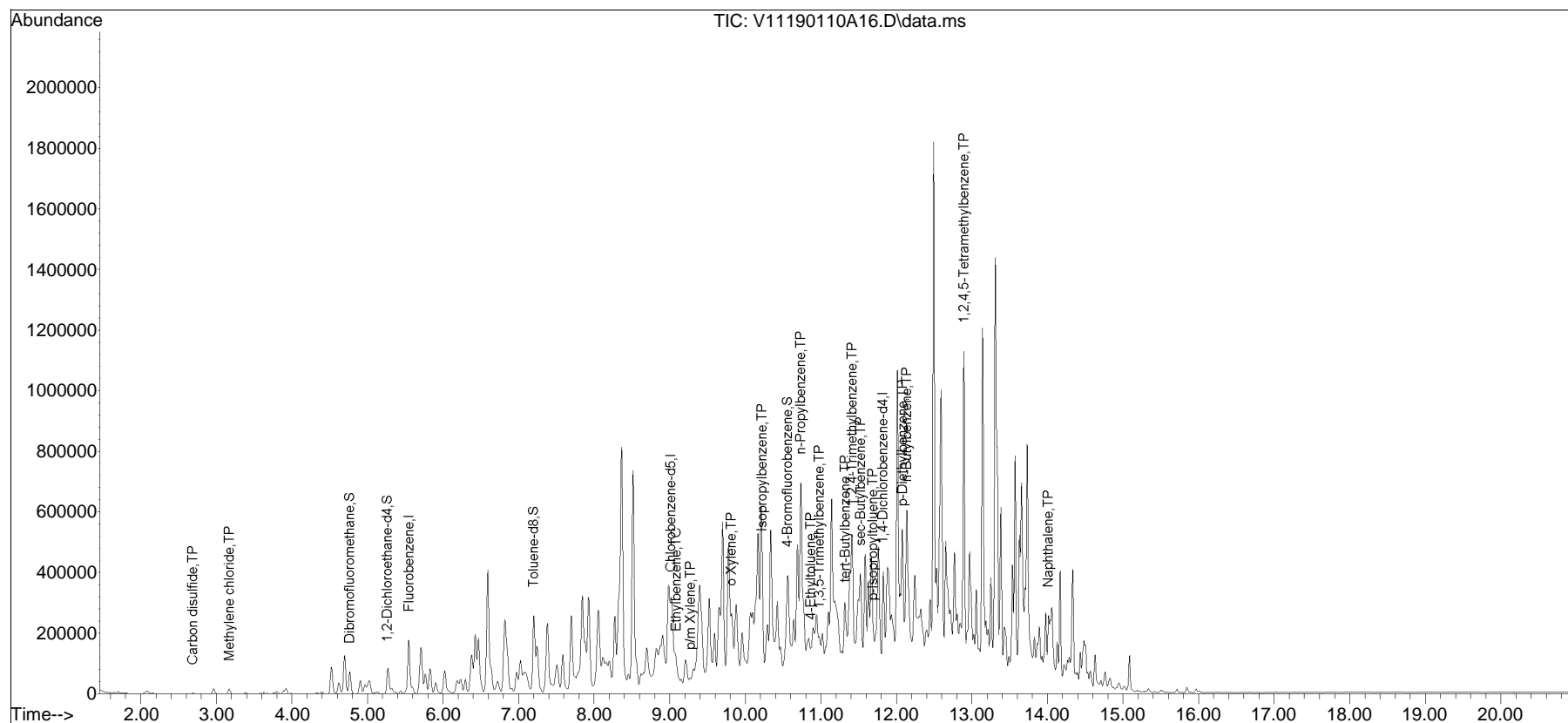


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2019\190110A\
 Data File : V11190110A16.D
 Acq On : 10 Jan 2019 01:18 pm
 Operator : VOA111:AD
 Sample : 11900707-06D,31H,5.66,5,0.040,,a
 Misc : WG1196507,ICAL15386
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jan 10 14:43:29 2019
 Quant Method : I:\VOLATILES\VOA111\2019\190110A\V111_190108N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Jan 09 10:10:31 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90110A\V11190110A01.D•

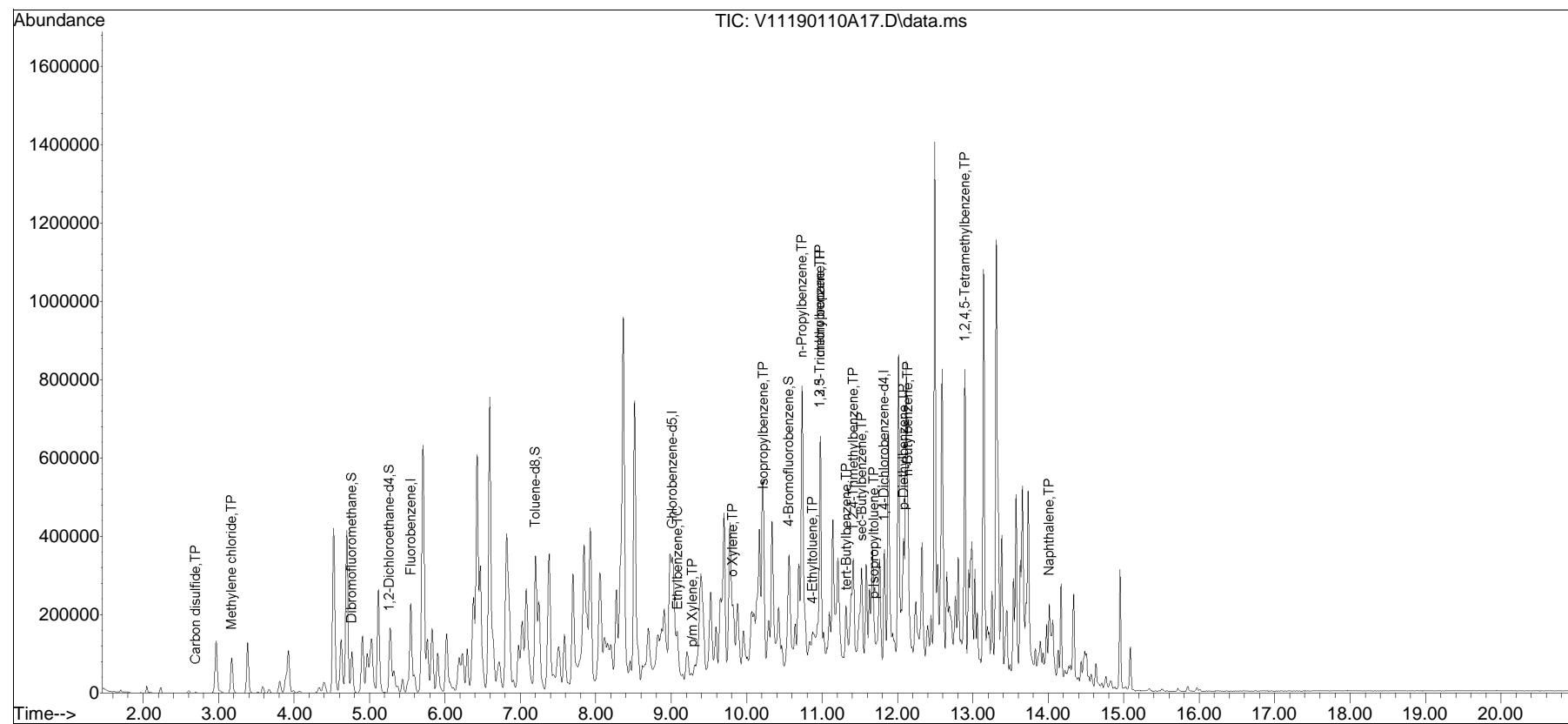


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2019\190110A\
 Data File : V11190110A17.D
 Acq On : 10 Jan 2019 01:44 pm
 Operator : VOA111:AD
 Sample : 11900707-07D,31H,5.92,5,0.010,,a
 Misc : WG1196507,ICAL15386
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 10 14:45:32 2019
 Quant Method : I:\VOLATILES\VOA111\2019\190110A\V111_190108N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Jan 09 10:10:31 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90110A\V11190110A01.D•

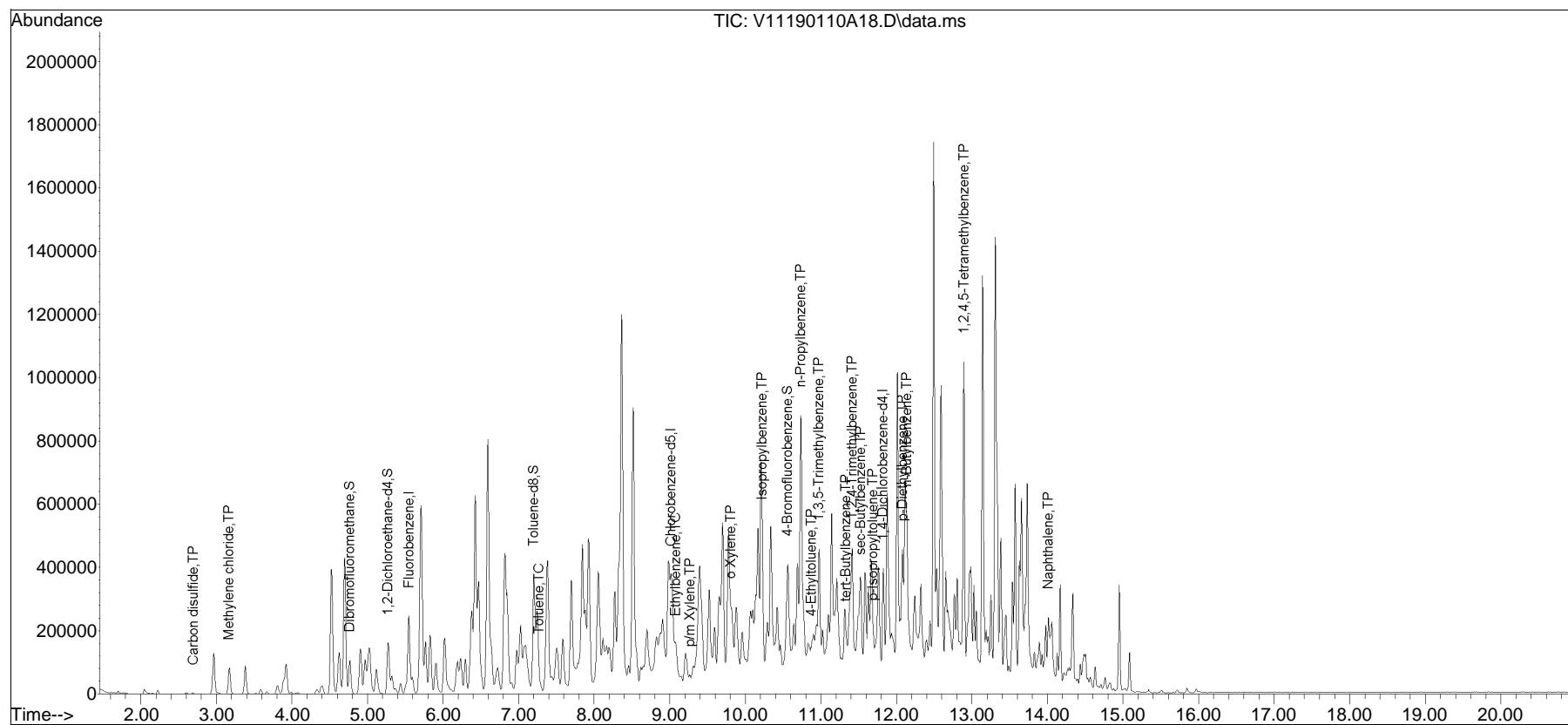


Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA111\2019\190110A\
 Data File : V11190110A18.D
 Acq On : 10 Jan 2019 02:10 pm
 Operator : VOA111:AD
 Sample : 11900707-09D,31H,6.11,5,0.025,,a
 Misc : WG1196507,ICAL15386
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 10 14:48:18 2019
 Quant Method : I:\VOLATILES\VOA111\2019\190110A\V111_190108N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Jan 09 10:10:31 2019
 Response via : Initial Calibration

Sub List : 8260-NYTCL - Megamix plus Diox90110A\V11190110A01.D•





ANALYTICAL REPORT

Lab Number:	L1900879
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	GERARD AVE. + E. 146TH ST.
Project Number:	170487001
Report Date:	01/18/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1900879-01	RB10_0-2	SOIL	BRONX, NY	01/08/19 11:30	01/08/19
L1900879-02	RB10_18-20	SOIL	BRONX, NY	01/08/19 11:35	01/08/19
L1900879-03	RB10_33-35	SOIL	BRONX, NY	01/08/19 11:40	01/08/19
L1900879-04	RB15_0-2	SOIL	BRONX, NY	01/08/19 13:00	01/08/19
L1900879-05	RB15_18-20	SOIL	BRONX, NY	01/08/19 13:05	01/08/19
L1900879-06	RB15_23-25	SOIL	BRONX, NY	01/08/19 13:15	01/08/19
L1900879-07	RB15_28-30	SOIL	BRONX, NY	01/08/19 13:10	01/08/19
L1900879-08	RB16_0-2	SOIL	BRONX, NY	01/08/19 10:40	01/08/19
L1900879-09	RB16_13-15	SOIL	BRONX, NY	01/08/19 10:45	01/08/19
L1900879-10	RB16_18-20	SOIL	BRONX, NY	01/08/19 10:50	01/08/19
L1900879-11	SODUP05_010819	SOIL	BRONX, NY	01/08/19 00:00	01/08/19
L1900879-12	SOFB04_010819	WATER	BRONX, NY	01/08/19 10:00	01/08/19
L1900879-13	SOTB07_010819	WATER	BRONX, NY	01/08/19 00:00	01/08/19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Semivolatile Organics

L1900879-01, -04, and -09: The sample has elevated detection limits due to the dilution required by the sample matrix.

The WG1196039-4/-5 MS/MSD recoveries, performed on L1900879-03, are below the acceptance criteria for benzoic acid (0%/0%) due to the concentration of this compound falling below the reported detection limit.

Pesticides

L1900879-06: The surrogate recovery is outside the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (181%); however, the sample was not re-extracted due to coelution with obvious interferences.

Total Metals

L1900879-01 through -11: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1196160-3/-4 MS/MSD recoveries for aluminum (214%/190%) and iron (53%/349%), performed on L1900879-03, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1196160-7/-8 MS/MSD recoveries for aluminum (197%/296%), iron (MS at 0%) and manganese (0%/0%), performed on L1900879-07, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1196160-7/-8 MS/MSD recoveries, performed on L1900879-07, are outside the acceptance criteria for thallium (73%/73%). A post digestion spike was performed and yielded unacceptable recoveries for thallium

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Case Narrative (continued)

(76%). The serial dilution recovery was not applicable; therefore, this element fails the matrix test and the result reported in the native sample should be considered estimated.

Cyanide, Total

The WG1196013-2/-3 LCS/LCSD recoveries (50%/75%), associated with L1900879-01 through -06 and -08 through -11, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits.

The results of the original analyses are reported. In addition, the WG1196013-2/-3 LCS/LCSD RPD (39%) is above the acceptance criteria.

The WG1196064-2/-3 LCS/LCSD RPD (39%), associated with L1900879-07, is above the acceptance criteria.

The WG1196064-5 MSD recovery (39%), performed on L1900879-07, is outside the acceptance criteria; however, the associated LCS recovery is within criteria. No further action was taken. In addition, the WG1196064-4/-5 MS/MSD RPD (89%) is above the acceptance criteria.

Hexavalent Chromium

The WG1196213-2 LCS recovery (79%), associated with L1900879-01 through -06 and -08 through -11, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1196215-2 LCS recovery (79%), associated with L1900879-07, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Cristin Walker

Title: Technical Director/Representative

Date: 01/18/19

ORGANICS

VOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01
 Client ID: RB10_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 23:10
 Analyst: JC
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.5	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.90	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.90	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.90	0.11	1
Dibromochloromethane	ND		ug/kg	0.90	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.90	0.24	1
Tetrachloroethene	ND		ug/kg	0.45	0.18	1
Chlorobenzene	ND		ug/kg	0.45	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.63	1
1,2-Dichloroethane	ND		ug/kg	0.90	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.45	0.15	1
Bromodichloromethane	ND		ug/kg	0.45	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.45	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.45	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.45	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.45	0.15	1
Benzene	ND		ug/kg	0.45	0.15	1
Toluene	ND		ug/kg	0.90	0.49	1
Ethylbenzene	ND		ug/kg	0.90	0.13	1
Chloromethane	ND		ug/kg	3.6	0.84	1
Bromomethane	ND		ug/kg	1.8	0.53	1
Vinyl chloride	ND		ug/kg	0.90	0.30	1
Chloroethane	ND		ug/kg	1.8	0.41	1
1,1-Dichloroethene	ND		ug/kg	0.90	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.12	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-01

Date Collected: 01/08/19 11:30

Client ID: RB10_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.45	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.51	1
o-Xylene	ND		ug/kg	0.90	0.26	1
Xylenes, Total	ND		ug/kg	0.90	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.90	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.90	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.22	1
Styrene	ND		ug/kg	0.90	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.0	0.83	1
Acetone	ND		ug/kg	9.0	4.4	1
Carbon disulfide	ND		ug/kg	9.0	4.1	1
2-Butanone	ND		ug/kg	9.0	2.0	1
Vinyl acetate	ND		ug/kg	9.0	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	9.0	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.12	1
2-Hexanone	ND		ug/kg	9.0	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.90	0.25	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.45	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.90	0.15	1
sec-Butylbenzene	ND		ug/kg	0.90	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.90	1
Hexachlorobutadiene	ND		ug/kg	3.6	0.15	1
Isopropylbenzene	ND		ug/kg	0.90	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.90	0.10	1
Naphthalene	ND		ug/kg	3.6	0.59	1
Acrylonitrile	ND		ug/kg	3.6	1.0	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01
Client ID: RB10_0-2
Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.90	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1
1,4-Dioxane	ND		ug/kg	90	32.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.35	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.5	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
 Client ID: RB10_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 00:52
 Analyst: MV
 Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	490	220	1
1,1-Dichloroethane	ND		ug/kg	98	14.	1
Chloroform	ND		ug/kg	150	14.	1
Carbon tetrachloride	ND		ug/kg	98	22.	1
1,2-Dichloropropane	ND		ug/kg	98	12.	1
Dibromochloromethane	ND		ug/kg	98	14.	1
1,1,2-Trichloroethane	ND		ug/kg	98	26.	1
Tetrachloroethene	ND		ug/kg	49	19.	1
Chlorobenzene	ND		ug/kg	49	12.	1
Trichlorofluoromethane	ND		ug/kg	390	68.	1
1,2-Dichloroethane	ND		ug/kg	98	25.	1
1,1,1-Trichloroethane	ND		ug/kg	49	16.	1
Bromodichloromethane	ND		ug/kg	49	11.	1
trans-1,3-Dichloropropene	ND		ug/kg	98	27.	1
cis-1,3-Dichloropropene	ND		ug/kg	49	15.	1
1,3-Dichloropropene, Total	ND		ug/kg	49	15.	1
1,1-Dichloropropene	ND		ug/kg	49	16.	1
Bromoform	ND		ug/kg	390	24.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	49	16.	1
Benzene	9500		ug/kg	49	16.	1
Toluene	8500		ug/kg	98	53.	1
Ethylbenzene	2600		ug/kg	98	14.	1
Chloromethane	ND		ug/kg	390	91.	1
Bromomethane	ND		ug/kg	200	57.	1
Vinyl chloride	ND		ug/kg	98	33.	1
Chloroethane	ND		ug/kg	200	44.	1
1,1-Dichloroethene	ND		ug/kg	98	23.	1
trans-1,2-Dichloroethene	ND		ug/kg	150	13.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
Client ID: RB10_18-20
Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	49	13.	1
1,2-Dichlorobenzene	ND		ug/kg	200	14.	1
1,3-Dichlorobenzene	ND		ug/kg	200	14.	1
1,4-Dichlorobenzene	ND		ug/kg	200	17.	1
Methyl tert butyl ether	ND		ug/kg	200	20.	1
p/m-Xylene	6800		ug/kg	200	55.	1
o-Xylene	840		ug/kg	98	28.	1
Xylenes, Total	7600		ug/kg	98	28.	1
cis-1,2-Dichloroethene	ND		ug/kg	98	17.	1
1,2-Dichloroethene, Total	ND		ug/kg	98	13.	1
Dibromomethane	ND		ug/kg	200	23.	1
Styrene	ND		ug/kg	98	19.	1
Dichlorodifluoromethane	ND		ug/kg	980	90.	1
Acetone	9300		ug/kg	980	470	1
Carbon disulfide	ND		ug/kg	980	450	1
2-Butanone	ND		ug/kg	980	220	1
Vinyl acetate	ND		ug/kg	980	210	1
4-Methyl-2-pentanone	ND		ug/kg	980	120	1
1,2,3-Trichloropropane	ND		ug/kg	200	12.	1
2-Hexanone	ND		ug/kg	980	120	1
Bromochloromethane	ND		ug/kg	200	20.	1
2,2-Dichloropropane	ND		ug/kg	200	20.	1
1,2-Dibromoethane	ND		ug/kg	98	27.	1
1,3-Dichloropropane	ND		ug/kg	200	16.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	49	13.	1
Bromobenzene	ND		ug/kg	200	14.	1
n-Butylbenzene	1600		ug/kg	98	16.	1
sec-Butylbenzene	1400		ug/kg	98	14.	1
tert-Butylbenzene	130	J	ug/kg	200	12.	1
o-Chlorotoluene	ND		ug/kg	200	19.	1
p-Chlorotoluene	ND		ug/kg	200	10.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	290	98.	1
Hexachlorobutadiene	ND		ug/kg	390	16.	1
Isopropylbenzene	2800		ug/kg	98	11.	1
p-Isopropyltoluene	56	J	ug/kg	98	11.	1
Naphthalene	590		ug/kg	390	64.	1
Acrylonitrile	ND		ug/kg	390	110	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
 Client ID: RB10_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	6700		ug/kg	98	17.	1
1,2,3-Trichlorobenzene	ND		ug/kg	200	32.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	27.	1
1,3,5-Trimethylbenzene	180	J	ug/kg	200	19.	1
1,2,4-Trimethylbenzene	900		ug/kg	200	33.	1
1,4-Dioxane	ND		ug/kg	9800	3400	1
p-Diethylbenzene	2200		ug/kg	200	17.	1
p-Ethyltoluene	1200		ug/kg	200	38.	1
1,2,4,5-Tetramethylbenzene	5700		ug/kg	200	19.	1
Ethyl ether	ND		ug/kg	200	33.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	490	140	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	128		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
 Client ID: RB10_33-35
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 23:35
 Analyst: JC
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.72	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.17	1
Bromodichloromethane	ND		ug/kg	0.52	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.52	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.52	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.52	0.16	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.56	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.97	1
Bromomethane	ND		ug/kg	2.1	0.60	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.47	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-03

Date Collected: 01/08/19 11:40

Client ID: RB10_33-35

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.58	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.25	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.95	1
Acetone	ND		ug/kg	10	5.0	1
Carbon disulfide	ND		ug/kg	10	4.7	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.52	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.2	0.18	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.2	0.67	1
Acrylonitrile	ND		ug/kg	4.2	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
Client ID: RB10_33-35
Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
1,4-Dioxane	ND		ug/kg	100	36.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.18	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	93		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-04
 Client ID: RB15_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 01:18
 Analyst: MV
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	370	170	1
1,1-Dichloroethane	ND		ug/kg	74	11.	1
Chloroform	ND		ug/kg	110	10.	1
Carbon tetrachloride	ND		ug/kg	74	17.	1
1,2-Dichloropropane	ND		ug/kg	74	9.2	1
Dibromochloromethane	ND		ug/kg	74	10.	1
1,1,2-Trichloroethane	ND		ug/kg	74	20.	1
Tetrachloroethene	1100		ug/kg	37	14.	1
Chlorobenzene	ND		ug/kg	37	9.4	1
Trichlorofluoromethane	ND		ug/kg	290	51.	1
1,2-Dichloroethane	ND		ug/kg	74	19.	1
1,1,1-Trichloroethane	ND		ug/kg	37	12.	1
Bromodichloromethane	ND		ug/kg	37	8.0	1
trans-1,3-Dichloropropene	ND		ug/kg	74	20.	1
cis-1,3-Dichloropropene	ND		ug/kg	37	12.	1
1,3-Dichloropropene, Total	ND		ug/kg	37	12.	1
1,1-Dichloropropene	ND		ug/kg	37	12.	1
Bromoform	ND		ug/kg	290	18.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	37	12.	1
Benzene	130		ug/kg	37	12.	1
Toluene	1900		ug/kg	74	40.	1
Ethylbenzene	ND		ug/kg	74	10.	1
Chloromethane	ND		ug/kg	290	69.	1
Bromomethane	ND		ug/kg	150	43.	1
Vinyl chloride	ND		ug/kg	74	25.	1
Chloroethane	ND		ug/kg	150	33.	1
1,1-Dichloroethene	ND		ug/kg	74	18.	1
trans-1,2-Dichloroethene	ND		ug/kg	110	10.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-04

Date Collected: 01/08/19 13:00

Client ID: RB15_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	37	10.	1
1,2-Dichlorobenzene	ND		ug/kg	150	11.	1
1,3-Dichlorobenzene	ND		ug/kg	150	11.	1
1,4-Dichlorobenzene	ND		ug/kg	150	12.	1
Methyl tert butyl ether	ND		ug/kg	150	15.	1
p/m-Xylene	ND		ug/kg	150	41.	1
o-Xylene	ND		ug/kg	74	21.	1
Xylenes, Total	ND		ug/kg	74	21.	1
cis-1,2-Dichloroethene	ND		ug/kg	74	13.	1
1,2-Dichloroethene, Total	ND		ug/kg	74	10.	1
Dibromomethane	ND		ug/kg	150	18.	1
Styrene	ND		ug/kg	74	14.	1
Dichlorodifluoromethane	ND		ug/kg	740	67.	1
Acetone	ND		ug/kg	740	350	1
Carbon disulfide	ND		ug/kg	740	340	1
2-Butanone	ND		ug/kg	740	160	1
Vinyl acetate	ND		ug/kg	740	160	1
4-Methyl-2-pentanone	ND		ug/kg	740	94.	1
1,2,3-Trichloropropane	ND		ug/kg	150	9.4	1
2-Hexanone	ND		ug/kg	740	87.	1
Bromochloromethane	ND		ug/kg	150	15.	1
2,2-Dichloropropane	ND		ug/kg	150	15.	1
1,2-Dibromoethane	ND		ug/kg	74	20.	1
1,3-Dichloropropane	ND		ug/kg	150	12.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	37	9.7	1
Bromobenzene	ND		ug/kg	150	11.	1
n-Butylbenzene	ND		ug/kg	74	12.	1
sec-Butylbenzene	ND		ug/kg	74	11.	1
tert-Butylbenzene	ND		ug/kg	150	8.7	1
o-Chlorotoluene	ND		ug/kg	150	14.	1
p-Chlorotoluene	ND		ug/kg	150	8.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	220	73.	1
Hexachlorobutadiene	ND		ug/kg	290	12.	1
Isopropylbenzene	ND		ug/kg	74	8.0	1
p-Isopropyltoluene	ND		ug/kg	74	8.0	1
Naphthalene	ND		ug/kg	290	48.	1
Acrylonitrile	ND		ug/kg	290	85.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-04
 Client ID: RB15_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	ND		ug/kg	74	12.	1
1,2,3-Trichlorobenzene	ND		ug/kg	150	24.	1
1,2,4-Trichlorobenzene	ND		ug/kg	150	20.	1
1,3,5-Trimethylbenzene	ND		ug/kg	150	14.	1
1,2,4-Trimethylbenzene	ND		ug/kg	150	24.	1
1,4-Dioxane	ND		ug/kg	7400	2600	1
p-Diethylbenzene	ND		ug/kg	150	13.	1
p-Ethyltoluene	ND		ug/kg	150	28.	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	150	14.	1
Ethyl ether	ND		ug/kg	150	25.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	370	100	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05
 Client ID: RB15_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:05
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 10:54
 Analyst: MV
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.1	1.9	1
1,1-Dichloroethane	ND		ug/kg	0.81	0.12	1
Chloroform	ND		ug/kg	1.2	0.11	1
Carbon tetrachloride	ND		ug/kg	0.81	0.19	1
1,2-Dichloropropane	ND		ug/kg	0.81	0.10	1
Dibromochloromethane	ND		ug/kg	0.81	0.11	1
1,1,2-Trichloroethane	ND		ug/kg	0.81	0.22	1
Tetrachloroethene	ND		ug/kg	0.41	0.16	1
Chlorobenzene	ND		ug/kg	0.41	0.10	1
Trichlorofluoromethane	ND		ug/kg	3.2	0.56	1
1,2-Dichloroethane	ND		ug/kg	0.81	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.41	0.14	1
Bromodichloromethane	ND		ug/kg	0.41	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.81	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	0.41	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	0.41	0.13	1
1,1-Dichloropropene	ND		ug/kg	0.41	0.13	1
Bromoform	ND		ug/kg	3.2	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.41	0.14	1
Benzene	0.26	J	ug/kg	0.41	0.14	1
Toluene	ND		ug/kg	0.81	0.44	1
Ethylbenzene	ND		ug/kg	0.81	0.11	1
Chloromethane	ND		ug/kg	3.2	0.76	1
Bromomethane	ND		ug/kg	1.6	0.47	1
Vinyl chloride	ND		ug/kg	0.81	0.27	1
Chloroethane	ND		ug/kg	1.6	0.37	1
1,1-Dichloroethene	ND		ug/kg	0.81	0.19	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.11	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-05

Date Collected: 01/08/19 13:05

Client ID: RB15_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.41	0.11	1
1,2-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,4-Dichlorobenzene	ND		ug/kg	1.6	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.6	0.16	1
p/m-Xylene	1.6		ug/kg	1.6	0.46	1
o-Xylene	1.0		ug/kg	0.81	0.24	1
Xylenes, Total	2.6		ug/kg	0.81	0.24	1
cis-1,2-Dichloroethene	ND		ug/kg	0.81	0.14	1
1,2-Dichloroethene, Total	ND		ug/kg	0.81	0.11	1
Dibromomethane	ND		ug/kg	1.6	0.19	1
Styrene	ND		ug/kg	0.81	0.16	1
Dichlorodifluoromethane	ND		ug/kg	8.1	0.74	1
Acetone	51		ug/kg	8.1	3.9	1
Carbon disulfide	ND		ug/kg	8.1	3.7	1
2-Butanone	ND		ug/kg	8.1	1.8	1
Vinyl acetate	ND		ug/kg	8.1	1.8	1
4-Methyl-2-pentanone	ND		ug/kg	8.1	1.0	1
1,2,3-Trichloropropane	ND		ug/kg	1.6	0.10	1
2-Hexanone	ND		ug/kg	8.1	0.96	1
Bromochloromethane	ND		ug/kg	1.6	0.17	1
2,2-Dichloropropane	ND		ug/kg	1.6	0.16	1
1,2-Dibromoethane	ND		ug/kg	0.81	0.23	1
1,3-Dichloropropane	ND		ug/kg	1.6	0.14	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.41	0.11	1
Bromobenzene	ND		ug/kg	1.6	0.12	1
n-Butylbenzene	0.24	J	ug/kg	0.81	0.14	1
sec-Butylbenzene	2.5		ug/kg	0.81	0.12	1
tert-Butylbenzene	0.45	J	ug/kg	1.6	0.10	1
o-Chlorotoluene	ND		ug/kg	1.6	0.16	1
p-Chlorotoluene	ND		ug/kg	1.6	0.09	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.4	0.81	1
Hexachlorobutadiene	ND		ug/kg	3.2	0.14	1
Isopropylbenzene	5.6		ug/kg	0.81	0.09	1
p-Isopropyltoluene	0.15	J	ug/kg	0.81	0.09	1
Naphthalene	0.86	J	ug/kg	3.2	0.53	1
Acrylonitrile	ND		ug/kg	3.2	0.94	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05
 Client ID: RB15_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:05
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	5.3		ug/kg	0.81	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.6	0.26	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.6	0.22	1
1,3,5-Trimethylbenzene	0.59	J	ug/kg	1.6	0.16	1
1,2,4-Trimethylbenzene	0.86	J	ug/kg	1.6	0.27	1
1,4-Dioxane	ND		ug/kg	81	28.	1
p-Diethylbenzene	1.5	J	ug/kg	1.6	0.14	1
p-Ethyltoluene	0.95	J	ug/kg	1.6	0.31	1
1,2,4,5-Tetramethylbenzene	4.3		ug/kg	1.6	0.16	1
Ethyl ether	ND		ug/kg	1.6	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.1	1.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	122		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-06
 Client ID: RB15_23-25
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:15
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 13:29
 Analyst: MKS
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	310	140	1
1,1-Dichloroethane	ND		ug/kg	62	9.0	1
Chloroform	ND		ug/kg	93	8.7	1
Carbon tetrachloride	ND		ug/kg	62	14.	1
1,2-Dichloropropane	ND		ug/kg	62	7.8	1
Dibromochloromethane	ND		ug/kg	62	8.7	1
1,1,2-Trichloroethane	ND		ug/kg	62	16.	1
Tetrachloroethene	ND		ug/kg	31	12.	1
Chlorobenzene	ND		ug/kg	31	7.9	1
Trichlorofluoromethane	ND		ug/kg	250	43.	1
1,2-Dichloroethane	ND		ug/kg	62	16.	1
1,1,1-Trichloroethane	ND		ug/kg	31	10.	1
Bromodichloromethane	ND		ug/kg	31	6.8	1
trans-1,3-Dichloropropene	ND		ug/kg	62	17.	1
cis-1,3-Dichloropropene	ND		ug/kg	31	9.8	1
1,3-Dichloropropene, Total	ND		ug/kg	31	9.8	1
1,1-Dichloropropene	ND		ug/kg	31	9.9	1
Bromoform	ND		ug/kg	250	15.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	31	10.	1
Benzene	610		ug/kg	31	10.	1
Toluene	ND		ug/kg	62	34.	1
Ethylbenzene	24	J	ug/kg	62	8.7	1
Chloromethane	ND		ug/kg	250	58.	1
Bromomethane	ND		ug/kg	120	36.	1
Vinyl chloride	ND		ug/kg	62	21.	1
Chloroethane	ND		ug/kg	120	28.	1
1,1-Dichloroethene	ND		ug/kg	62	15.	1
trans-1,2-Dichloroethene	ND		ug/kg	93	8.5	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-06

Date Collected: 01/08/19 13:15

Client ID: RB15_23-25

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	31	8.5	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.9	1
1,3-Dichlorobenzene	ND		ug/kg	120	9.2	1
1,4-Dichlorobenzene	ND		ug/kg	120	11.	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	57	J	ug/kg	120	35.	1
o-Xylene	46	J	ug/kg	62	18.	1
Xylenes, Total	100	J	ug/kg	62	18.	1
cis-1,2-Dichloroethene	ND		ug/kg	62	11.	1
1,2-Dichloroethene, Total	ND		ug/kg	62	8.5	1
Dibromomethane	ND		ug/kg	120	15.	1
Styrene	ND		ug/kg	62	12.	1
Dichlorodifluoromethane	ND		ug/kg	620	57.	1
Acetone	ND		ug/kg	620	300	1
Carbon disulfide	ND		ug/kg	620	280	1
2-Butanone	ND		ug/kg	620	140	1
Vinyl acetate	ND		ug/kg	620	130	1
4-Methyl-2-pentanone	ND		ug/kg	620	79.	1
1,2,3-Trichloropropane	ND		ug/kg	120	7.9	1
2-Hexanone	ND		ug/kg	620	73.	1
Bromochloromethane	ND		ug/kg	120	13.	1
2,2-Dichloropropane	ND		ug/kg	120	12.	1
1,2-Dibromoethane	ND		ug/kg	62	17.	1
1,3-Dichloropropane	ND		ug/kg	120	10.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	31	8.2	1
Bromobenzene	ND		ug/kg	120	9.0	1
n-Butylbenzene	90		ug/kg	62	10.	1
sec-Butylbenzene	90		ug/kg	62	9.0	1
tert-Butylbenzene	14	J	ug/kg	120	7.3	1
o-Chlorotoluene	ND		ug/kg	120	12.	1
p-Chlorotoluene	ND		ug/kg	120	6.7	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	190	62.	1
Hexachlorobutadiene	ND		ug/kg	250	10.	1
Isopropylbenzene	280		ug/kg	62	6.8	1
p-Isopropyltoluene	43	J	ug/kg	62	6.8	1
Naphthalene	92	J	ug/kg	250	40.	1
Acrylonitrile	ND		ug/kg	250	71.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-06
 Client ID: RB15_23-25
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:15
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	530		ug/kg	62	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	120	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	17.	1
1,3,5-Trimethylbenzene	140		ug/kg	120	12.	1
1,2,4-Trimethylbenzene	23	J	ug/kg	120	21.	1
1,4-Dioxane	ND		ug/kg	6200	2200	1
p-Diethylbenzene	140		ug/kg	120	11.	1
p-Ethyltoluene	31	J	ug/kg	120	24.	1
1,2,4,5-Tetramethylbenzene	440		ug/kg	120	12.	1
Ethyl ether	ND		ug/kg	120	21.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	310	88.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
 Client ID: RB15_28-30
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 10:28
 Analyst: MV
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.1	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.51	0.20	1
Chlorobenzene	ND		ug/kg	0.51	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.1	0.71	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.51	0.17	1
Bromodichloromethane	ND		ug/kg	0.51	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.51	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.51	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.51	0.16	1
Bromoform	ND		ug/kg	4.1	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.51	0.17	1
Benzene	0.31	J	ug/kg	0.51	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.1	0.95	1
Bromomethane	ND		ug/kg	2.0	0.59	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.46	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-07

Date Collected: 01/08/19 13:10

Client ID: RB15_28-30

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.51	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.57	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.93	1
Acetone	23		ug/kg	10	4.9	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.51	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.15	1
n-Butylbenzene	0.28	J	ug/kg	1.0	0.17	1
sec-Butylbenzene	0.72	J	ug/kg	1.0	0.15	1
tert-Butylbenzene	0.35	J	ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.20	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.1	0.17	1
Isopropylbenzene	1.1		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.1	0.66	1
Acrylonitrile	ND		ug/kg	4.1	1.2	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
 Client ID: RB15_28-30
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.59	J	ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	100	36.	1
p-Diethylbenzene	0.51	J	ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.39	1
1,2,4,5-Tetramethylbenzene	1.2	J	ug/kg	2.0	0.20	1
Ethyl ether	ND		ug/kg	2.0	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.1	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
 Client ID: RB16_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 00:01
 Analyst: JC
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	1.4		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.95	0.52	1
Ethylbenzene	ND		ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-08

Date Collected: 01/08/19 10:40

Client ID: RB16_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.95	0.28	1
Xylenes, Total	ND		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	ND		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
Vinyl acetate	ND		ug/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.12	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.95	0.16	1
sec-Butylbenzene	ND		ug/kg	0.95	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
 Client ID: RB16_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	95	33.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	93		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09
 Client ID: RB16_13-15
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 00:27
 Analyst: JC
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	0.40	J	ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.95	0.52	1
Ethylbenzene	ND		ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-09

Date Collected: 01/08/19 10:45

Client ID: RB16_13-15

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.95	0.28	1
Xylenes, Total	ND		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.95	0.13	1
Dibromomethane	ND		ug/kg	1.9	0.23	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	ND		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
Vinyl acetate	ND		ug/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.9	0.12	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
2,2-Dichloropropane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.27	1
1,3-Dichloropropane	ND		ug/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.48	0.13	1
Bromobenzene	ND		ug/kg	1.9	0.14	1
n-Butylbenzene	ND		ug/kg	0.95	0.16	1
sec-Butylbenzene	ND		ug/kg	0.95	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
o-Chlorotoluene	ND		ug/kg	1.9	0.18	1
p-Chlorotoluene	ND		ug/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.95	1
Hexachlorobutadiene	ND		ug/kg	3.8	0.16	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
Acrylonitrile	ND		ug/kg	3.8	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09
Client ID: RB16_13-15
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
1,4-Dioxane	ND		ug/kg	95	34.	1
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1
p-Ethyltoluene	ND		ug/kg	1.9	0.37	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1
Ethyl ether	ND		ug/kg	1.9	0.32	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
 Client ID: RB16_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 00:53
 Analyst: JC
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1
Dibromochloromethane	ND		ug/kg	0.98	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.49	0.16	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	3.9	0.91	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
Chloroethane	ND		ug/kg	2.0	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-10

Date Collected: 01/08/19 10:50

Client ID: RB16_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
Xylenes, Total	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.13	1
Dibromomethane	ND		ug/kg	2.0	0.23	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.90	1
Acetone	ND		ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.4	1
2-Butanone	ND		ug/kg	9.8	2.2	1
Vinyl acetate	ND		ug/kg	9.8	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.12	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.98	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	ND		ug/kg	0.98	0.11	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.11	1
Naphthalene	ND		ug/kg	3.9	0.64	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
Client ID: RB16_18-20
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.98	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	98	34.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.17	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	94		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
 Client ID: SODUP05_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 01/11/19 02:35
 Analyst: MV
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	330	150	1
1,1-Dichloroethane	ND		ug/kg	66	9.5	1
Chloroform	ND		ug/kg	99	9.2	1
Carbon tetrachloride	ND		ug/kg	66	15.	1
1,2-Dichloropropane	ND		ug/kg	66	8.2	1
Dibromochloromethane	ND		ug/kg	66	9.2	1
1,1,2-Trichloroethane	ND		ug/kg	66	18.	1
Tetrachloroethene	ND		ug/kg	33	13.	1
Chlorobenzene	ND		ug/kg	33	8.4	1
Trichlorofluoromethane	ND		ug/kg	260	46.	1
1,2-Dichloroethane	ND		ug/kg	66	17.	1
1,1,1-Trichloroethane	ND		ug/kg	33	11.	1
Bromodichloromethane	ND		ug/kg	33	7.2	1
trans-1,3-Dichloropropene	ND		ug/kg	66	18.	1
cis-1,3-Dichloropropene	ND		ug/kg	33	10.	1
1,3-Dichloropropene, Total	ND		ug/kg	33	10.	1
1,1-Dichloropropene	ND		ug/kg	33	10.	1
Bromoform	ND		ug/kg	260	16.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	33	11.	1
Benzene	280		ug/kg	33	11.	1
Toluene	ND		ug/kg	66	36.	1
Ethylbenzene	16	J	ug/kg	66	9.3	1
Chloromethane	ND		ug/kg	260	61.	1
Bromomethane	ND		ug/kg	130	38.	1
Vinyl chloride	ND		ug/kg	66	22.	1
Chloroethane	ND		ug/kg	130	30.	1
1,1-Dichloroethene	ND		ug/kg	66	16.	1
trans-1,2-Dichloroethene	ND		ug/kg	99	9.0	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
Client ID: SODUP05_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	33	9.0	1
1,2-Dichlorobenzene	ND		ug/kg	130	9.5	1
1,3-Dichlorobenzene	ND		ug/kg	130	9.7	1
1,4-Dichlorobenzene	ND		ug/kg	130	11.	1
Methyl tert butyl ether	ND		ug/kg	130	13.	1
p/m-Xylene	ND		ug/kg	130	37.	1
o-Xylene	27	J	ug/kg	66	19.	1
Xylenes, Total	27	J	ug/kg	66	19.	1
cis-1,2-Dichloroethene	ND		ug/kg	66	12.	1
1,2-Dichloroethene, Total	ND		ug/kg	66	9.0	1
Dibromomethane	ND		ug/kg	130	16.	1
Styrene	ND		ug/kg	66	13.	1
Dichlorodifluoromethane	ND		ug/kg	660	60.	1
Acetone	ND		ug/kg	660	320	1
Carbon disulfide	ND		ug/kg	660	300	1
2-Butanone	ND		ug/kg	660	150	1
Vinyl acetate	ND		ug/kg	660	140	1
4-Methyl-2-pentanone	ND		ug/kg	660	84.	1
1,2,3-Trichloropropane	ND		ug/kg	130	8.4	1
2-Hexanone	ND		ug/kg	660	78.	1
Bromochloromethane	ND		ug/kg	130	13.	1
2,2-Dichloropropane	ND		ug/kg	130	13.	1
1,2-Dibromoethane	ND		ug/kg	66	18.	1
1,3-Dichloropropane	ND		ug/kg	130	11.	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	33	8.7	1
Bromobenzene	ND		ug/kg	130	9.5	1
n-Butylbenzene	44	J	ug/kg	66	11.	1
sec-Butylbenzene	51	J	ug/kg	66	9.6	1
tert-Butylbenzene	ND		ug/kg	130	7.8	1
o-Chlorotoluene	ND		ug/kg	130	12.	1
p-Chlorotoluene	ND		ug/kg	130	7.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	200	66.	1
Hexachlorobutadiene	ND		ug/kg	260	11.	1
Isopropylbenzene	150		ug/kg	66	7.2	1
p-Isopropyltoluene	12	J	ug/kg	66	7.2	1
Naphthalene	53	J	ug/kg	260	43.	1
Acrylonitrile	ND		ug/kg	260	76.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
Client ID: SODUP05_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
n-Propylbenzene	270		ug/kg	66	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	130	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	130	18.	1
1,3,5-Trimethylbenzene	62	J	ug/kg	130	13.	1
1,2,4-Trimethylbenzene	ND		ug/kg	130	22.	1
1,4-Dioxane	ND		ug/kg	6600	2300	1
p-Diethylbenzene	81	J	ug/kg	130	12.	1
p-Ethyltoluene	ND		ug/kg	130	25.	1
1,2,4,5-Tetramethylbenzene	260		ug/kg	130	12.	1
Ethyl ether	ND		ug/kg	130	22.	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	330	93.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/10/19 12:17
 Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
Client ID: SOFB04_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-13
 Client ID: SOTB07_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/09/19 11:32
 Analyst: RR

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-13
 Client ID: SOTB07_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-13
 Client ID: SOTB07_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	98		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/09/19 10:42
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1196086-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/09/19 10:42
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1196086-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/09/19 10:42
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 13 Batch: WG1196086-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/19 11:50
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1196485-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/19 11:50
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1196485-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/19 11:50
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1196485-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/10/19 11:50
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1196485-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	103		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/10/19 19:13
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02,04,11 Batch: WG1196648-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/10/19 19:13
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02,04,11 Batch: WG1196648-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
 Analytical Date: 01/10/19 19:13
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02,04,11 Batch: WG1196648-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	100		70-130



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/19 19:42
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,03,08-10 Batch: WG1196736-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/10/19 19:42
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,03,08-10 Batch: WG1196736-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/10/19 19:42
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01,03,08-10 Batch: WG1196736-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	90		70-130



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/11/19 07:53
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1196750-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
1,3-Dichloropropene, Total	ND		ug/kg	25	7.9
1,1-Dichloropropene	ND		ug/kg	25	8.0
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/11/19 07:53
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1196750-5					
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
Xylenes, Total	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
1,2-Dichloroethene, Total	ND		ug/kg	50	6.8
Dibromomethane	ND		ug/kg	100	12.
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
Vinyl acetate	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
1,2,3-Trichloropropane	ND		ug/kg	100	6.4
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
2,2-Dichloropropane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,3-Dichloropropane	ND		ug/kg	100	8.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	6.6
Bromobenzene	ND		ug/kg	100	7.2
n-Butylbenzene	ND		ug/kg	50	8.4
sec-Butylbenzene	ND		ug/kg	50	7.3
tert-Butylbenzene	ND		ug/kg	100	5.9
o-Chlorotoluene	ND		ug/kg	100	9.6

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/11/19 07:53
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1196750-5					
p-Chlorotoluene	ND		ug/kg	100	5.4
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Hexachlorobutadiene	ND		ug/kg	200	8.4
Isopropylbenzene	ND		ug/kg	50	5.4
p-Isopropyltoluene	ND		ug/kg	50	5.4
Naphthalene	ND		ug/kg	200	32.
Acrylonitrile	ND		ug/kg	200	58.
n-Propylbenzene	ND		ug/kg	50	8.6
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
1,3,5-Trimethylbenzene	ND		ug/kg	100	9.6
1,2,4-Trimethylbenzene	ND		ug/kg	100	17.
1,4-Dioxane	ND		ug/kg	5000	1800
p-Diethylbenzene	ND		ug/kg	100	8.8
p-Ethyltoluene	ND		ug/kg	100	19.
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	9.6
Ethyl ether	ND		ug/kg	100	17.
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	71.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	100		70-130

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/11/19 07:53
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 05,07 Batch: WG1196778-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/11/19 07:53
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 05,07 Batch: WG1196778-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260C
Analytical Date: 01/11/19 07:53
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 05,07 Batch: WG1196778-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	100	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1196086-3 WG1196086-4								
Methylene chloride	93		94		70-130	1		20
1,1-Dichloroethane	94		93		70-130	1		20
Chloroform	91		90		70-130	1		20
Carbon tetrachloride	85		84		63-132	1		20
1,2-Dichloropropane	96		97		70-130	1		20
Dibromochloromethane	96		92		63-130	4		20
1,1,2-Trichloroethane	100		98		70-130	2		20
Tetrachloroethene	94		92		70-130	2		20
Chlorobenzene	95		95		75-130	0		20
Trichlorofluoromethane	88		84		62-150	5		20
1,2-Dichloroethane	90		90		70-130	0		20
1,1,1-Trichloroethane	89		87		67-130	2		20
Bromodichloromethane	92		92		67-130	0		20
trans-1,3-Dichloropropene	100		97		70-130	3		20
cis-1,3-Dichloropropene	94		94		70-130	0		20
1,1-Dichloropropene	91		90		70-130	1		20
Bromoform	100		100		54-136	0		20
1,1,2,2-Tetrachloroethane	110		100		67-130	10		20
Benzene	88		88		70-130	0		20
Toluene	97		97		70-130	0		20
Ethylbenzene	94		93		70-130	1		20
Chloromethane	74		73		64-130	1		20
Bromomethane	74		76		39-139	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1196086-3 WG1196086-4								
Vinyl chloride	81		78		55-140	4		20
Chloroethane	92		90		55-138	2		20
1,1-Dichloroethene	94		91		61-145	3		20
trans-1,2-Dichloroethene	91		92		70-130	1		20
Trichloroethene	94		93		70-130	1		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	98		97		63-130	1		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	91		91		70-130	0		20
Dibromomethane	92		93		70-130	1		20
1,2,3-Trichloropropane	120		120		64-130	0		20
Acrylonitrile	130		120		70-130	8		20
Styrene	95		100		70-130	5		20
Dichlorodifluoromethane	64		62		36-147	3		20
Acetone	130		110		58-148	17		20
Carbon disulfide	96		94		51-130	2		20
2-Butanone	110		110		63-138	0		20
Vinyl acetate	120		110		70-130	9		20
4-Methyl-2-pentanone	120		110		59-130	9		20
2-Hexanone	110		100		57-130	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1196086-3 WG1196086-4								
Bromochloromethane	96		94		70-130	2		20
2,2-Dichloropropane	100		95		63-133	5		20
1,2-Dibromoethane	98		97		70-130	1		20
1,3-Dichloropropane	99		98		70-130	1		20
1,1,1,2-Tetrachloroethane	93		94		64-130	1		20
Bromobenzene	100		100		70-130	0		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		110		70-130	10		20
tert-Butylbenzene	84		86		70-130	2		20
o-Chlorotoluene	96		97		70-130	1		20
p-Chlorotoluene	99		100		70-130	1		20
1,2-Dibromo-3-chloropropane	110		98		41-144	12		20
Hexachlorobutadiene	93		91		63-130	2		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	98		99		70-130	1		20
Naphthalene	86		80		70-130	7		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	88		82		70-130	7		20
1,2,4-Trichlorobenzene	89		85		70-130	5		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	170	Q	160		56-162	6		20
p-Diethylbenzene	96		96		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 13 Batch: WG1196086-3 WG1196086-4								
p-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	87		90		70-130	3		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	94		100		70-130	6		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	99		98		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	97		99		70-130
Dibromofluoromethane	99		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1196485-3 WG1196485-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	95		94		63-132	1		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	98		99		63-130	1		20
1,1,2-Trichloroethane	99		97		70-130	2		20
Tetrachloroethene	93		91		70-130	2		20
Chlorobenzene	100		98		75-130	2		20
Trichlorofluoromethane	86		87		62-150	1		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	99		100		67-130	1		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	94		94		70-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	93		95		70-130	2		20
Bromoform	96		97		54-136	1		20
1,1,2,2-Tetrachloroethane	96		95		67-130	1		20
Benzene	98		98		70-130	0		20
Toluene	99		97		70-130	2		20
Ethylbenzene	95		94		70-130	1		20
Chloromethane	65		68		64-130	5		20
Bromomethane	37	Q	37	Q	39-139	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1196485-3 WG1196485-4								
Vinyl chloride	95		95		55-140	0		20
Chloroethane	120		120		55-138	0		20
1,1-Dichloroethene	94		94		61-145	0		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		99		70-130	1		20
1,2-Dichlorobenzene	96		95		70-130	1		20
1,3-Dichlorobenzene	98		97		70-130	1		20
1,4-Dichlorobenzene	98		97		70-130	1		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	100		100		70-130	0		20
1,2,3-Trichloropropane	96		94		64-130	2		20
Acrylonitrile	100		97		70-130	3		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	62		62		36-147	0		20
Acetone	62		61		58-148	2		20
Carbon disulfide	98		98		51-130	0		20
2-Butanone	82		80		63-138	2		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	84		80		59-130	5		20
2-Hexanone	76		76		57-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1196485-3 WG1196485-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	100		99		63-133	1		20
1,2-Dibromoethane	95		97		70-130	2		20
1,3-Dichloropropane	98		98		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	97		97		70-130	0		20
n-Butylbenzene	83		82		53-136	1		20
sec-Butylbenzene	85		84		70-130	1		20
tert-Butylbenzene	86		85		70-130	1		20
o-Chlorotoluene	93		92		70-130	1		20
p-Chlorotoluene	94		93		70-130	1		20
1,2-Dibromo-3-chloropropane	87		88		41-144	1		20
Hexachlorobutadiene	65		66		63-130	2		20
Isopropylbenzene	90		88		70-130	2		20
p-Isopropyltoluene	86		84		70-130	2		20
Naphthalene	83		81		70-130	2		20
n-Propylbenzene	90		88		69-130	2		20
1,2,3-Trichlorobenzene	87		85		70-130	2		20
1,2,4-Trichlorobenzene	86		86		70-130	0		20
1,3,5-Trimethylbenzene	93		92		64-130	1		20
1,2,4-Trimethylbenzene	92		90		70-130	2		20
1,4-Dioxane	78		106		56-162	30	Q	20
p-Diethylbenzene	84		83		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1196485-3 WG1196485-4								
p-Ethyltoluene	91		90		70-130	1		20
1,2,4,5-Tetramethylbenzene	82		82		70-130	0		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	92		88		70-130	4		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	99		98		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	94		92		70-130
Dibromofluoromethane	102		103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02,04,11 Batch: WG1196648-3 WG1196648-4								
Methylene chloride	85		86		70-130	1		30
1,1-Dichloroethane	88		89		70-130	1		30
Chloroform	90		90		70-130	0		30
Carbon tetrachloride	91		92		70-130	1		30
1,2-Dichloropropane	88		88		70-130	0		30
Dibromochloromethane	88		89		70-130	1		30
1,1,2-Trichloroethane	88		88		70-130	0		30
Tetrachloroethene	92		94		70-130	2		30
Chlorobenzene	86		88		70-130	2		30
Trichlorofluoromethane	100		104		70-139	4		30
1,2-Dichloroethane	91		90		70-130	1		30
1,1,1-Trichloroethane	91		93		70-130	2		30
Bromodichloromethane	88		89		70-130	1		30
trans-1,3-Dichloropropene	86		86		70-130	0		30
cis-1,3-Dichloropropene	88		88		70-130	0		30
1,1-Dichloropropene	89		92		70-130	3		30
Bromoform	88		88		70-130	0		30
1,1,2,2-Tetrachloroethane	84		82		70-130	2		30
Benzene	89		91		70-130	2		30
Toluene	86		89		70-130	3		30
Ethylbenzene	86		89		70-130	3		30
Chloromethane	85		84		52-130	1		30
Bromomethane	94		96		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02,04,11 Batch: WG1196648-3 WG1196648-4								
Vinyl chloride	89		90		67-130	1		30
Chloroethane	96		96		50-151	0		30
1,1-Dichloroethene	90		92		65-135	2		30
trans-1,2-Dichloroethene	91		91		70-130	0		30
Trichloroethene	91		93		70-130	2		30
1,2-Dichlorobenzene	88		88		70-130	0		30
1,3-Dichlorobenzene	88		89		70-130	1		30
1,4-Dichlorobenzene	88		89		70-130	1		30
Methyl tert butyl ether	91		91		66-130	0		30
p/m-Xylene	87		89		70-130	2		30
o-Xylene	86		88		70-130	2		30
cis-1,2-Dichloroethene	92		93		70-130	1		30
Dibromomethane	94		92		70-130	2		30
Styrene	84		87		70-130	4		30
Dichlorodifluoromethane	85		85		30-146	0		30
Acetone	85		84		54-140	1		30
Carbon disulfide	84		86		59-130	2		30
2-Butanone	89		86		70-130	3		30
Vinyl acetate	90		87		70-130	3		30
4-Methyl-2-pentanone	82		80		70-130	2		30
1,2,3-Trichloropropane	87		84		68-130	4		30
2-Hexanone	80		78		70-130	3		30
Bromochloromethane	98		98		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02,04,11 Batch: WG1196648-3 WG1196648-4								
2,2-Dichloropropane	90		92		70-130	2		30
1,2-Dibromoethane	91		92		70-130	1		30
1,3-Dichloropropane	89		88		69-130	1		30
1,1,1,2-Tetrachloroethane	87		90		70-130	3		30
Bromobenzene	88		88		70-130	0		30
n-Butylbenzene	86		88		70-130	2		30
sec-Butylbenzene	85		88		70-130	3		30
tert-Butylbenzene	85		88		70-130	3		30
o-Chlorotoluene	83		84		70-130	1		30
p-Chlorotoluene	84		86		70-130	2		30
1,2-Dibromo-3-chloropropane	84		81		68-130	4		30
Hexachlorobutadiene	89		90		67-130	1		30
Isopropylbenzene	86		89		70-130	3		30
p-Isopropyltoluene	87		90		70-130	3		30
Naphthalene	87		86		70-130	1		30
Acrylonitrile	95		92		70-130	3		30
n-Propylbenzene	85		88		70-130	3		30
1,2,3-Trichlorobenzene	90		90		70-130	0		30
1,2,4-Trichlorobenzene	90		88		70-130	2		30
1,3,5-Trimethylbenzene	86		88		70-130	2		30
1,2,4-Trimethylbenzene	85		87		70-130	2		30
1,4-Dioxane	90		88		65-136	2		30
p-Diethylbenzene	87		89		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02,04,11 Batch: WG1196648-3 WG1196648-4								
p-Ethyltoluene	87		88		70-130	1		30
1,2,4,5-Tetramethylbenzene	86		87		70-130	1		30
Ethyl ether	100		98		67-130	2		30
trans-1,4-Dichloro-2-butene	84		83		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		93		70-130
Toluene-d8	97		99		70-130
4-Bromofluorobenzene	96		96		70-130
Dibromofluoromethane	102		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03,08-10 Batch: WG1196736-3 WG1196736-4								
Methylene chloride	83		82		70-130	1		30
1,1-Dichloroethane	85		82		70-130	4		30
Chloroform	86		84		70-130	2		30
Carbon tetrachloride	86		86		70-130	0		30
1,2-Dichloropropane	83		81		70-130	2		30
Dibromochloromethane	83		81		70-130	2		30
1,1,2-Trichloroethane	88		84		70-130	5		30
Tetrachloroethene	90		90		70-130	0		30
Chlorobenzene	85		84		70-130	1		30
Trichlorofluoromethane	112		112		70-139	0		30
1,2-Dichloroethane	83		79		70-130	5		30
1,1,1-Trichloroethane	89		86		70-130	3		30
Bromodichloromethane	82		79		70-130	4		30
trans-1,3-Dichloropropene	84		81		70-130	4		30
cis-1,3-Dichloropropene	82		80		70-130	2		30
1,1-Dichloropropene	90		88		70-130	2		30
Bromoform	83		81		70-130	2		30
1,1,2,2-Tetrachloroethane	88		84		70-130	5		30
Benzene	85		83		70-130	2		30
Toluene	86		85		70-130	1		30
Ethylbenzene	84		84		70-130	0		30
Chloromethane	103		102		52-130	1		30
Bromomethane	118		119		57-147	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03,08-10 Batch: WG1196736-3 WG1196736-4								
Vinyl chloride	119		118		67-130	1		30
Chloroethane	119		121		50-151	2		30
1,1-Dichloroethene	92		91		65-135	1		30
trans-1,2-Dichloroethene	88		86		70-130	2		30
Trichloroethene	88		86		70-130	2		30
1,2-Dichlorobenzene	86		85		70-130	1		30
1,3-Dichlorobenzene	88		86		70-130	2		30
1,4-Dichlorobenzene	85		84		70-130	1		30
Methyl tert butyl ether	81		78		66-130	4		30
p/m-Xylene	87		86		70-130	1		30
o-Xylene	85		84		70-130	1		30
cis-1,2-Dichloroethene	85		84		70-130	1		30
Dibromomethane	87		83		70-130	5		30
Styrene	82		80		70-130	2		30
Dichlorodifluoromethane	114		114		30-146	0		30
Acetone	74		64		54-140	14		30
Carbon disulfide	90		88		59-130	2		30
2-Butanone	60	Q	58	Q	70-130	3		30
Vinyl acetate	80		76		70-130	5		30
4-Methyl-2-pentanone	74		72		70-130	3		30
1,2,3-Trichloropropane	85		81		68-130	5		30
2-Hexanone	69	Q	64	Q	70-130	8		30
Bromochloromethane	90		85		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03,08-10 Batch: WG1196736-3 WG1196736-4								
2,2-Dichloropropane	83		81		70-130	2		30
1,2-Dibromoethane	88		86		70-130	2		30
1,3-Dichloropropane	87		84		69-130	4		30
1,1,1,2-Tetrachloroethane	84		83		70-130	1		30
Bromobenzene	85		84		70-130	1		30
n-Butylbenzene	89		88		70-130	1		30
sec-Butylbenzene	89		88		70-130	1		30
tert-Butylbenzene	87		87		70-130	0		30
o-Chlorotoluene	86		84		70-130	2		30
p-Chlorotoluene	84		82		70-130	2		30
1,2-Dibromo-3-chloropropane	83		78		68-130	6		30
Hexachlorobutadiene	86		85		67-130	1		30
Isopropylbenzene	88		87		70-130	1		30
p-Isopropyltoluene	88		87		70-130	1		30
Naphthalene	83		81		70-130	2		30
Acrylonitrile	76		70		70-130	8		30
n-Propylbenzene	88		88		70-130	0		30
1,2,3-Trichlorobenzene	88		89		70-130	1		30
1,2,4-Trichlorobenzene	88		87		70-130	1		30
1,3,5-Trimethylbenzene	86		86		70-130	0		30
1,2,4-Trimethylbenzene	86		85		70-130	1		30
1,4-Dioxane	84		84		65-136	0		30
p-Diethylbenzene	86		85		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03,08-10 Batch: WG1196736-3 WG1196736-4								
p-Ethyltoluene	87		86		70-130	1		30
1,2,4,5-Tetramethylbenzene	81		80		70-130	1		30
Ethyl ether	83		81		67-130	2		30
trans-1,4-Dichloro-2-butene	78		76		70-130	3		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	91		89		70-130
Toluene-d8	99		98		70-130
4-Bromofluorobenzene	91		92		70-130
Dibromofluoromethane	95		93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1196750-3 WG1196750-4								
Methylene chloride	88		88		70-130	0		30
1,1-Dichloroethane	89		89		70-130	0		30
Chloroform	92		94		70-130	2		30
Carbon tetrachloride	90		90		70-130	0		30
1,2-Dichloropropane	90		90		70-130	0		30
Dibromochloromethane	91		90		70-130	1		30
1,1,2-Trichloroethane	91		90		70-130	1		30
Tetrachloroethene	91		93		70-130	2		30
Chlorobenzene	88		89		70-130	1		30
Trichlorofluoromethane	96		97		70-139	1		30
1,2-Dichloroethane	93		92		70-130	1		30
1,1,1-Trichloroethane	90		91		70-130	1		30
Bromodichloromethane	92		91		70-130	1		30
trans-1,3-Dichloropropene	89		88		70-130	1		30
cis-1,3-Dichloropropene	91		91		70-130	0		30
1,1-Dichloropropene	89		90		70-130	1		30
Bromoform	90		90		70-130	0		30
1,1,2,2-Tetrachloroethane	85		84		70-130	1		30
Benzene	90		91		70-130	1		30
Toluene	88		88		70-130	0		30
Ethylbenzene	87		88		70-130	1		30
Chloromethane	87		83		52-130	5		30
Bromomethane	95		97		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1196750-3 WG1196750-4								
Vinyl chloride	85		86		67-130	1		30
Chloroethane	94		95		50-151	1		30
1,1-Dichloroethene	88		89		65-135	1		30
trans-1,2-Dichloroethene	91		91		70-130	0		30
Trichloroethene	90		92		70-130	2		30
1,2-Dichlorobenzene	89		90		70-130	1		30
1,3-Dichlorobenzene	89		90		70-130	1		30
1,4-Dichlorobenzene	90		89		70-130	1		30
Methyl tert butyl ether	94		92		66-130	2		30
p/m-Xylene	87		89		70-130	2		30
o-Xylene	87		88		70-130	1		30
cis-1,2-Dichloroethene	93		93		70-130	0		30
Dibromomethane	97		94		70-130	3		30
Styrene	87		87		70-130	0		30
Dichlorodifluoromethane	82		81		30-146	1		30
Acetone	84		78		54-140	7		30
Carbon disulfide	83		84		59-130	1		30
2-Butanone	89		87		70-130	2		30
Vinyl acetate	92		91		70-130	1		30
4-Methyl-2-pentanone	82		79		70-130	4		30
1,2,3-Trichloropropane	88		87		68-130	1		30
2-Hexanone	83		79		70-130	5		30
Bromochloromethane	100		101		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1196750-3 WG1196750-4								
2,2-Dichloropropane	89		90		70-130	1		30
1,2-Dibromoethane	93		93		70-130	0		30
1,3-Dichloropropane	89		90		69-130	1		30
1,1,1,2-Tetrachloroethane	89		90		70-130	1		30
Bromobenzene	90		90		70-130	0		30
n-Butylbenzene	84		86		70-130	2		30
sec-Butylbenzene	85		87		70-130	2		30
tert-Butylbenzene	85		87		70-130	2		30
o-Chlorotoluene	84		84		70-130	0		30
p-Chlorotoluene	84		86		70-130	2		30
1,2-Dibromo-3-chloropropane	82		84		68-130	2		30
Hexachlorobutadiene	85		87		67-130	2		30
Isopropylbenzene	87		88		70-130	1		30
p-Isopropyltoluene	86		87		70-130	1		30
Naphthalene	88		88		70-130	0		30
Acrylonitrile	95		94		70-130	1		30
n-Propylbenzene	84		86		70-130	2		30
1,2,3-Trichlorobenzene	90		91		70-130	1		30
1,2,4-Trichlorobenzene	91		92		70-130	1		30
1,3,5-Trimethylbenzene	87		88		70-130	1		30
1,2,4-Trimethylbenzene	86		87		70-130	1		30
1,4-Dioxane	90		87		65-136	3		30
p-Diethylbenzene	87		88		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1196750-3 WG1196750-4								
p-Ethyltoluene	86		88		70-130	2		30
1,2,4,5-Tetramethylbenzene	87		88		70-130	1		30
Ethyl ether	100		100		67-130	0		30
trans-1,4-Dichloro-2-butene	86		85		70-130	1		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		94		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	96		98		70-130
Dibromofluoromethane	102		103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,07 Batch: WG1196778-3 WG1196778-4								
Methylene chloride	88		88		70-130	0		30
1,1-Dichloroethane	89		89		70-130	0		30
Chloroform	92		94		70-130	2		30
Carbon tetrachloride	90		90		70-130	0		30
1,2-Dichloropropane	90		90		70-130	0		30
Dibromochloromethane	91		90		70-130	1		30
1,1,2-Trichloroethane	91		90		70-130	1		30
Tetrachloroethene	91		93		70-130	2		30
Chlorobenzene	88		89		70-130	1		30
Trichlorofluoromethane	96		97		70-139	1		30
1,2-Dichloroethane	93		92		70-130	1		30
1,1,1-Trichloroethane	90		91		70-130	1		30
Bromodichloromethane	92		91		70-130	1		30
trans-1,3-Dichloropropene	89		88		70-130	1		30
cis-1,3-Dichloropropene	91		91		70-130	0		30
1,1-Dichloropropene	89		90		70-130	1		30
Bromoform	90		90		70-130	0		30
1,1,2,2-Tetrachloroethane	85		84		70-130	1		30
Benzene	90		91		70-130	1		30
Toluene	88		88		70-130	0		30
Ethylbenzene	87		88		70-130	1		30
Chloromethane	87		83		52-130	5		30
Bromomethane	95		97		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,07 Batch: WG1196778-3 WG1196778-4								
Vinyl chloride	85		86		67-130	1		30
Chloroethane	94		95		50-151	1		30
1,1-Dichloroethene	88		89		65-135	1		30
trans-1,2-Dichloroethene	91		91		70-130	0		30
Trichloroethene	90		92		70-130	2		30
1,2-Dichlorobenzene	89		90		70-130	1		30
1,3-Dichlorobenzene	89		90		70-130	1		30
1,4-Dichlorobenzene	90		89		70-130	1		30
Methyl tert butyl ether	94		92		66-130	2		30
p/m-Xylene	87		89		70-130	2		30
o-Xylene	87		88		70-130	1		30
cis-1,2-Dichloroethene	93		93		70-130	0		30
Dibromomethane	97		94		70-130	3		30
Styrene	87		87		70-130	0		30
Dichlorodifluoromethane	82		81		30-146	1		30
Acetone	84		78		54-140	7		30
Carbon disulfide	83		84		59-130	1		30
2-Butanone	89		87		70-130	2		30
Vinyl acetate	92		91		70-130	1		30
4-Methyl-2-pentanone	82		79		70-130	4		30
1,2,3-Trichloropropane	88		87		68-130	1		30
2-Hexanone	83		79		70-130	5		30
Bromochloromethane	100		101		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,07 Batch: WG1196778-3 WG1196778-4								
2,2-Dichloropropane	89		90		70-130	1		30
1,2-Dibromoethane	93		93		70-130	0		30
1,3-Dichloropropane	89		90		69-130	1		30
1,1,1,2-Tetrachloroethane	89		90		70-130	1		30
Bromobenzene	90		90		70-130	0		30
n-Butylbenzene	84		86		70-130	2		30
sec-Butylbenzene	85		87		70-130	2		30
tert-Butylbenzene	85		87		70-130	2		30
o-Chlorotoluene	84		84		70-130	0		30
p-Chlorotoluene	84		86		70-130	2		30
1,2-Dibromo-3-chloropropane	82		84		68-130	2		30
Hexachlorobutadiene	85		87		67-130	2		30
Isopropylbenzene	87		88		70-130	1		30
p-Isopropyltoluene	86		87		70-130	1		30
Naphthalene	88		88		70-130	0		30
Acrylonitrile	95		94		70-130	1		30
n-Propylbenzene	84		86		70-130	2		30
1,2,3-Trichlorobenzene	90		91		70-130	1		30
1,2,4-Trichlorobenzene	91		92		70-130	1		30
1,3,5-Trimethylbenzene	87		88		70-130	1		30
1,2,4-Trimethylbenzene	86		87		70-130	1		30
1,4-Dioxane	90		87		65-136	3		30
p-Diethylbenzene	87		88		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,07 Batch: WG1196778-3 WG1196778-4								
p-Ethyltoluene	86		88		70-130	2		30
1,2,4,5-Tetramethylbenzene	87		88		70-130	1		30
Ethyl ether	100		100		67-130	0		30
trans-1,4-Dichloro-2-butene	86		85		70-130	1		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	95		94		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	96		97		70-130
Dibromofluoromethane	102		103		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03,08-10 QC Batch ID: WG1196736-6 WG1196736-7 QC Sample: L1900879-03 Client ID: RB10_33-35												
Methylene chloride	ND	96.5	84	87		88	86		70-130	5		30
1,1-Dichloroethane	ND	96.5	91	94		95	92		70-130	4		30
Chloroform	ND	96.5	90	93		92	90		70-130	3		30
Carbon tetrachloride	ND	96.5	97	101		100	97		70-130	2		30
1,2-Dichloropropane	ND	96.5	84	87		86	84		70-130	2		30
Dibromochloromethane	ND	96.5	80	82		82	80		70-130	3		30
1,1,2-Trichloroethane	ND	96.5	80	82		82	80		70-130	2		30
Tetrachloroethene	ND	96.5	88	91		90	88		70-130	2		30
Chlorobenzene	ND	96.5	79	82		80	78		70-130	1		30
Trichlorofluoromethane	ND	96.5	130	130		130	131		70-139	6		30
1,2-Dichloroethane	ND	96.5	76	79		79	77		70-130	3		30
1,1,1-Trichloroethane	ND	96.5	97	100		100	98		70-130	3		30
Bromodichloromethane	ND	96.5	81	84		84	82		70-130	3		30
trans-1,3-Dichloropropene	ND	96.5	80	83		82	80		70-130	3		30
cis-1,3-Dichloropropene	ND	96.5	80	83		83	81		70-130	3		30
1,1-Dichloropropene	ND	96.5	97	101		100	100		70-130	5		30
Bromoform	ND	96.5	79	82		81	80		70-130	3		30
1,1,2,2-Tetrachloroethane	ND	96.5	75	78		76	74		70-130	2		30
Benzene	ND	96.5	89	92		92	90		70-130	3		30
Toluene	ND	96.5	87	90		88	86		70-130	2		30
Ethylbenzene	ND	96.5	80	83		80	78		70-130	0		30
Chloromethane	ND	96.5	110	117		120	119		52-130	8		30
Bromomethane	ND	96.5	130	135		140	134		57-147	5		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03,08-10 QC Batch ID: WG1196736-6 WG1196736-7 QC Sample: L1900879-03 Client ID: RB10_33-35												
Vinyl chloride	ND	96.5	140	142	Q	140	138	Q	67-130	3		30
Chloroethane	ND	96.5	150	152	Q	150	145		50-151	1		30
1,1-Dichloroethene	ND	96.5	110	110		110	111		65-135	7		30
trans-1,2-Dichloroethene	ND	96.5	95	98		100	98		70-130	5		30
Trichloroethene	ND	96.5	89	93		93	91		70-130	4		30
1,2-Dichlorobenzene	ND	96.5	74	76		71	70		70-130	3		30
1,3-Dichlorobenzene	ND	96.5	74	76		70	69	Q	70-130	5		30
1,4-Dichlorobenzene	ND	96.5	70	73		67	65	Q	70-130	5		30
Methyl tert butyl ether	ND	96.5	77	79		80	79		66-130	5		30
p/m-Xylene	ND	193	160	84		160	78		70-130	1		30
o-Xylene	ND	193	160	83		160	78		70-130	1		30
cis-1,2-Dichloroethene	ND	96.5	89	92		92	90		70-130	4		30
Dibromomethane	ND	96.5	79	81		81	79		70-130	3		30
Styrene	ND	193	160	81		160	76		70-130	1		30
Dichlorodifluoromethane	ND	96.5	130	137		140	140		30-146	8		30
Acetone	ND	96.5	70	72		74	72		54-140	5		30
Carbon disulfide	ND	96.5	100	106		110	106		59-130	6		30
2-Butanone	ND	96.5	64	66	Q	67	65	Q	70-130	4		30
Vinyl acetate	ND	96.5	76	79		74	73		70-130	3		30
4-Methyl-2-pentanone	ND	96.5	68	70		70	69	Q	70-130	3		30
1,2,3-Trichloropropane	ND	96.5	71	74		73	71		68-130	2		30
2-Hexanone	ND	96.5	61	63	Q	62	61	Q	70-130	2		30
Bromochloromethane	ND	96.5	87	90		90	88		70-130	4		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03,08-10 QC Batch ID: WG1196736-6 WG1196736-7 QC Sample: L1900879-03 Client ID: RB10_33-35												
2,2-Dichloropropane	ND	96.5	89	92		93	91		70-130	5		30
1,2-Dibromoethane	ND	96.5	80	83		82	80		70-130	3		30
1,3-Dichloropropane	ND	96.5	80	83		81	80		69-130	2		30
1,1,1,2-Tetrachloroethane	ND	96.5	82	85		84	82		70-130	2		30
Bromobenzene	ND	96.5	79	81		78	76		70-130	1		30
n-Butylbenzene	ND	96.5	70	72		60	59	Q	70-130	14		30
sec-Butylbenzene	ND	96.5	78	81		73	71		70-130	7		30
tert-Butylbenzene	ND	96.5	80	83		77	75		70-130	4		30
o-Chlorotoluene	ND	96.5	76	78		75	73		70-130	1		30
p-Chlorotoluene	ND	96.5	72	74		69	67	Q	70-130	5		30
1,2-Dibromo-3-chloropropane	ND	96.5	71	73		74	72		68-130	5		30
Hexachlorobutadiene	ND	96.5	65	67		52	51	Q	67-130	22		30
Isopropylbenzene	ND	96.5	84	87		82	80		70-130	2		30
p-Isopropyltoluene	ND	96.5	75	77		67	66	Q	70-130	10		30
Naphthalene	ND	96.5	67	69	Q	68	66	Q	70-130	2		30
Acrylonitrile	ND	96.5	69	72		72	70		70-130	4		30
n-Propylbenzene	ND	96.5	79	82		75	74		70-130	5		30
1,2,3-Trichlorobenzene	ND	96.5	66	68	Q	63	62	Q	70-130	4		30
1,2,4-Trichlorobenzene	ND	96.5	65	67	Q	61	60	Q	70-130	6		30
1,3,5-Trimethylbenzene	ND	96.5	78	80		74	72		70-130	5		30
1,2,4-Trimethylbenzene	ND	96.5	75	77		71	69	Q	70-130	6		30
1,4-Dioxane	ND	4830	4100	85		4100	80		65-136	0		30
p-Diethylbenzene	ND	96.5	69	71		60	59	Q	70-130	14		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03,08-10 QC Batch ID: WG1196736-6 WG1196736-7 QC Sample: L1900879-03 Client ID: RB10_33-35												
p-Ethyltoluene	ND	96.5	76	78		71	69	Q	70-130	7		30
1,2,4,5-Tetramethylbenzene	ND	96.5	69	72		63	61	Q	70-130	10		30
Ethyl ether	ND	96.5	81	84		87	85		67-130	7		30
trans-1,4-Dichloro-2-butene	ND	96.5	68	70		70	68	Q	70-130	3		30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		86		70-130
4-Bromofluorobenzene	90		91		70-130
Dibromofluoromethane	97		95		70-130
Toluene-d8	99		98		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,07 QC Batch ID: WG1196778-11 WG1196778-12 QC Sample: L1900879-07 Client ID: RB15_28-30												
Methylene chloride	ND	136	140	101		99	98		70-130	32	Q	30
1,1-Dichloroethane	ND	136	140	106		110	105		70-130	30		30
Chloroform	ND	136	140	105		100	103		70-130	32	Q	30
Carbon tetrachloride	ND	136	160	115		110	112		70-130	32	Q	30
1,2-Dichloropropane	ND	136	140	106		100	101		70-130	34	Q	30
Dibromochloromethane	ND	136	150	112		110	105		70-130	36	Q	30
1,1,2-Trichloroethane	ND	136	150	110		110	110		70-130	29		30
Tetrachloroethene	ND	136	140	106		98	97		70-130	38	Q	30
Chlorobenzene	ND	136	130	98		89	88		70-130	39	Q	30
Trichlorofluoromethane	ND	136	180	130		130	129		70-139	30		30
1,2-Dichloroethane	ND	136	150	109		100	101		70-130	37	Q	30
1,1,1-Trichloroethane	ND	136	160	114		110	112		70-130	31	Q	30
Bromodichloromethane	ND	136	150	108		100	101		70-130	36	Q	30
trans-1,3-Dichloropropene	ND	136	140	103		98	97		70-130	35	Q	30
cis-1,3-Dichloropropene	ND	136	140	106		99	98		70-130	37	Q	30
1,1-Dichloropropene	ND	136	150	111		110	107		70-130	33	Q	30
Bromoform	ND	136	160	115		110	106		70-130	37	Q	30
1,1,2,2-Tetrachloroethane	ND	136	140	101		95	94		70-130	37	Q	30
Benzene	0.31J	136	140	106		100	102		70-130	33	Q	30
Toluene	ND	136	140	100		97	96		70-130	34	Q	30
Ethylbenzene	ND	136	140	100		89	88		70-130	42	Q	30
Chloromethane	ND	136	130	98		100	100		52-130	28		30
Bromomethane	ND	136	150	110		120	114		57-147	26		30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,07 QC Batch ID: WG1196778-11 WG1196778-12 QC Sample: L1900879-07 Client ID: RB15_28-30												
Vinyl chloride	ND	136	150	110		110	112		67-130	28		30
Chloroethane	ND	136	160	120		120	118		50-151	31	Q	30
1,1-Dichloroethene	ND	136	160	115		120	114		65-135	30		30
trans-1,2-Dichloroethene	ND	136	150	109		110	107		70-130	31	Q	30
Trichloroethene	ND	136	150	110		110	104		70-130	35	Q	30
1,2-Dichlorobenzene	ND	136	130	95		80	79		70-130	47	Q	30
1,3-Dichlorobenzene	ND	136	120	91		75	74		70-130	50	Q	30
1,4-Dichlorobenzene	ND	136	120	90		73	72		70-130	50	Q	30
Methyl tert butyl ether	ND	136	150	112		110	105		66-130	36	Q	30
p/m-Xylene	ND	272	270	99		170	85		70-130	44	Q	30
o-Xylene	ND	272	270	99		180	87		70-130	42	Q	30
cis-1,2-Dichloroethene	ND	136	150	108		110	106		70-130	31	Q	30
Dibromomethane	ND	136	160	116		110	107		70-130	38	Q	30
Styrene	ND	272	270	99		170	86		70-130	43	Q	30
Dichlorodifluoromethane	ND	136	140	106		110	110		30-146	26		30
Acetone	23	136	170	110		110	82		54-140	47	Q	30
Carbon disulfide	ND	136	140	106		110	104		59-130	31	Q	30
2-Butanone	ND	136	160	119		110	110		70-130	37	Q	30
Vinyl acetate	ND	136	150	111		100	102		70-130	38	Q	30
4-Methyl-2-pentanone	ND	136	150	110		100	99		70-130	40	Q	30
1,2,3-Trichloropropane	ND	136	140	104		96	95		68-130	38	Q	30
2-Hexanone	ND	136	150	107		97	96		70-130	40	Q	30
Bromochloromethane	ND	136	160	118		110	110		70-130	35	Q	30

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,07 QC Batch ID: WG1196778-11 WG1196778-12 QC Sample: L1900879-07 Client ID: RB15_28-30												
2,2-Dichloropropane	ND	136	150	108		110	107		70-130	31	Q	30
1,2-Dibromoethane	ND	136	150	112		100	103		70-130	38	Q	30
1,3-Dichloropropane	ND	136	140	105		100	99		69-130	35	Q	30
1,1,1,2-Tetrachloroethane	ND	136	140	104		100	98		70-130	34	Q	30
Bromobenzene	ND	136	130	97		87	86		70-130	41	Q	30
n-Butylbenzene	0.28J	136	120	91		62	62	Q	70-130	66	Q	30
sec-Butylbenzene	0.72J	136	140	100		78	77		70-130	54	Q	30
tert-Butylbenzene	0.35J	136	140	100		82	81		70-130	50	Q	30
o-Chlorotoluene	ND	136	120	91		77	76		70-130	47	Q	30
p-Chlorotoluene	ND	136	120	89		73	72		70-130	50	Q	30
1,2-Dibromo-3-chloropropane	ND	136	160	116		110	104		68-130	40	Q	30
Hexachlorobutadiene	ND	136	130	97		63	62	Q	67-130	71	Q	30
Isopropylbenzene	1.1	136	140	105		100	100		70-130	34	Q	30
p-Isopropyltoluene	ND	136	130	97		72	71		70-130	58	Q	30
Naphthalene	ND	136	140	101		88	87		70-130	44	Q	30
Acrylonitrile	ND	136	170	123		110	112		70-130	38	Q	30
n-Propylbenzene	0.59J	136	130	95		86	85		70-130	40	Q	30
1,2,3-Trichlorobenzene	ND	136	120	90		75	74		70-130	49	Q	30
1,2,4-Trichlorobenzene	ND	136	120	85		69	68	Q	70-130	51	Q	30
1,3,5-Trimethylbenzene	ND	136	130	96		78	77		70-130	50	Q	30
1,2,4-Trimethylbenzene	ND	136	130	93		75	74		70-130	51	Q	30
1,4-Dioxane	ND	6800	10000	151	Q	5300	105		65-136	64	Q	30
p-Diethylbenzene	0.51J	136	130	96		68	67	Q	70-130	62	Q	30

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,07 QC Batch ID: WG1196778-11 WG1196778-12 QC Sample: L1900879-07 Client ID: RB15_28-30												
p-Ethyltoluene	ND	136	130	95		74	73		70-130	54	Q	30
1,2,4,5-Tetramethylbenzene	1.2J	136	140	99		83	82		70-130	48	Q	30
Ethyl ether	ND	136	160	120		110	112		67-130	35	Q	30
trans-1,4-Dichloro-2-butene	ND	136	130	98		89	88		70-130	39	Q	30

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		95		70-130
4-Bromofluorobenzene	97		98		70-130
Dibromofluoromethane	103		99		70-130
Toluene-d8	97		98		70-130

SEMIVOLATILES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01 D
 Client ID: RB10_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 15:08
 Analyst: EK
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	270	J	ug/kg	730	95.	5
1,2,4-Trichlorobenzene	ND		ug/kg	920	100	5
Hexachlorobenzene	ND		ug/kg	550	100	5
Bis(2-chloroethyl)ether	ND		ug/kg	820	120	5
2-Chloronaphthalene	ND		ug/kg	920	91.	5
1,2-Dichlorobenzene	ND		ug/kg	920	160	5
1,3-Dichlorobenzene	ND		ug/kg	920	160	5
1,4-Dichlorobenzene	ND		ug/kg	920	160	5
3,3'-Dichlorobenzidine	ND		ug/kg	920	240	5
2,4-Dinitrotoluene	ND		ug/kg	920	180	5
2,6-Dinitrotoluene	ND		ug/kg	920	160	5
Fluoranthene	4300		ug/kg	550	100	5
4-Chlorophenyl phenyl ether	ND		ug/kg	920	98.	5
4-Bromophenyl phenyl ether	ND		ug/kg	920	140	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	160	5
Bis(2-chloroethoxy)methane	ND		ug/kg	990	92.	5
Hexachlorobutadiene	ND		ug/kg	920	130	5
Hexachlorocyclopentadiene	ND		ug/kg	2600	830	5
Hexachloroethane	ND		ug/kg	730	150	5
Isophorone	ND		ug/kg	820	120	5
Naphthalene	ND		ug/kg	920	110	5
Nitrobenzene	ND		ug/kg	820	140	5
NDPA/DPA	ND		ug/kg	730	100	5
n-Nitrosodi-n-propylamine	ND		ug/kg	920	140	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	920	320	5
Butyl benzyl phthalate	ND		ug/kg	920	230	5
Di-n-butylphthalate	ND		ug/kg	920	170	5
Di-n-octylphthalate	ND		ug/kg	920	310	5

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01 D
 Client ID: RB10_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	920	85.	5
Dimethyl phthalate	ND		ug/kg	920	190	5
Benzo(a)anthracene	2500		ug/kg	550	100	5
Benzo(a)pyrene	2000		ug/kg	730	220	5
Benzo(b)fluoranthene	2800		ug/kg	550	150	5
Benzo(k)fluoranthene	820		ug/kg	550	150	5
Chrysene	2200		ug/kg	550	95.	5
Acenaphthylene	ND		ug/kg	730	140	5
Anthracene	740		ug/kg	550	180	5
Benzo(ghi)perylene	1400		ug/kg	730	110	5
Fluorene	250	J	ug/kg	920	89.	5
Phenanthrene	3200		ug/kg	550	110	5
Dibenzo(a,h)anthracene	300	J	ug/kg	550	100	5
Indeno(1,2,3-cd)pyrene	1300		ug/kg	730	130	5
Pyrene	4700		ug/kg	550	91.	5
Biphenyl	ND		ug/kg	2100	210	5
4-Chloroaniline	ND		ug/kg	920	170	5
2-Nitroaniline	ND		ug/kg	920	180	5
3-Nitroaniline	ND		ug/kg	920	170	5
4-Nitroaniline	ND		ug/kg	920	380	5
Dibenzofuran	120	J	ug/kg	920	86.	5
2-Methylnaphthalene	ND		ug/kg	1100	110	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	920	96.	5
Acetophenone	ND		ug/kg	920	110	5
2,4,6-Trichlorophenol	ND		ug/kg	550	170	5
p-Chloro-m-cresol	ND		ug/kg	920	140	5
2-Chlorophenol	ND		ug/kg	920	110	5
2,4-Dichlorophenol	ND		ug/kg	820	150	5
2,4-Dimethylphenol	ND		ug/kg	920	300	5
2-Nitrophenol	ND		ug/kg	2000	340	5
4-Nitrophenol	ND		ug/kg	1300	370	5
2,4-Dinitrophenol	ND		ug/kg	4400	430	5
4,6-Dinitro-o-cresol	ND		ug/kg	2400	440	5
Pentachlorophenol	ND		ug/kg	730	200	5
Phenol	ND		ug/kg	920	140	5
2-Methylphenol	ND		ug/kg	920	140	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1300	140	5

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-01 D

Date Collected: 01/08/19 11:30

Client ID: RB10_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	920	180	5
Benzoic Acid	ND		ug/kg	3000	920	5
Benzyl Alcohol	ND		ug/kg	920	280	5
Carbazole	140	J	ug/kg	920	89.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	29		10-136
4-Terphenyl-d14	65		18-120

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-02 D2

Date Collected: 01/08/19 11:35

Client ID: RB10_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 01/09/19 11:10

Analytical Date: 01/15/19 02:18

Analyst: JG

Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	34000		ug/kg	1400	260	10
Phenanthrene	26000		ug/kg	1400	270	10
Pyrene	29000		ug/kg	1400	220	10

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02 D
 Client ID: RB10_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 16:50
 Analyst: EK
 Percent Solids: 72%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	680		ug/kg	360	47.	2
1,2,4-Trichlorobenzene	ND		ug/kg	450	52.	2
Hexachlorobenzene	ND		ug/kg	270	50.	2
Bis(2-chloroethyl)ether	ND		ug/kg	400	61.	2
2-Chloronaphthalene	ND		ug/kg	450	45.	2
1,2-Dichlorobenzene	ND		ug/kg	450	81.	2
1,3-Dichlorobenzene	ND		ug/kg	450	78.	2
1,4-Dichlorobenzene	ND		ug/kg	450	79.	2
3,3'-Dichlorobenzidine	ND		ug/kg	450	120	2
2,4-Dinitrotoluene	ND		ug/kg	450	90.	2
2,6-Dinitrotoluene	ND		ug/kg	450	77.	2
Fluoranthene	25000	E	ug/kg	270	52.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	450	48.	2
4-Bromophenyl phenyl ether	ND		ug/kg	450	69.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	540	77.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	490	45.	2
Hexachlorobutadiene	ND		ug/kg	450	66.	2
Hexachlorocyclopentadiene	ND		ug/kg	1300	410	2
Hexachloroethane	ND		ug/kg	360	73.	2
Isophorone	ND		ug/kg	400	58.	2
Naphthalene	1900		ug/kg	450	55.	2
Nitrobenzene	ND		ug/kg	400	67.	2
NDPA/DPA	ND		ug/kg	360	51.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	450	70.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	450	160	2
Butyl benzyl phthalate	ND		ug/kg	450	110	2
Di-n-butylphthalate	ND		ug/kg	450	85.	2
Di-n-octylphthalate	ND		ug/kg	450	150	2

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-02 D

Date Collected: 01/08/19 11:35

Client ID: RB10_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	450	42.	2
Dimethyl phthalate	ND		ug/kg	450	95.	2
Benzo(a)anthracene	12000		ug/kg	270	51.	2
Benzo(a)pyrene	11000		ug/kg	360	110	2
Benzo(b)fluoranthene	15000		ug/kg	270	76.	2
Benzo(k)fluoranthene	4500		ug/kg	270	72.	2
Chrysene	9600		ug/kg	270	47.	2
Acenaphthylene	2000		ug/kg	360	70.	2
Anthracene	7100		ug/kg	270	88.	2
Benzo(ghi)perylene	8700		ug/kg	360	53.	2
Fluorene	1900		ug/kg	450	44.	2
Phenanthrene	20000	E	ug/kg	270	55.	2
Dibenzo(a,h)anthracene	1700		ug/kg	270	52.	2
Indeno(1,2,3-cd)pyrene	8200		ug/kg	360	63.	2
Pyrene	21000	E	ug/kg	270	45.	2
Biphenyl	ND		ug/kg	1000	100	2
4-Chloroaniline	ND		ug/kg	450	82.	2
2-Nitroaniline	ND		ug/kg	450	87.	2
3-Nitroaniline	ND		ug/kg	450	85.	2
4-Nitroaniline	ND		ug/kg	450	190	2
Dibenzofuran	540		ug/kg	450	43.	2
2-Methylnaphthalene	1400		ug/kg	540	54.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	450	47.	2
Acetophenone	ND		ug/kg	450	56.	2
2,4,6-Trichlorophenol	ND		ug/kg	270	85.	2
p-Chloro-m-cresol	ND		ug/kg	450	67.	2
2-Chlorophenol	ND		ug/kg	450	53.	2
2,4-Dichlorophenol	ND		ug/kg	400	72.	2
2,4-Dimethylphenol	ND		ug/kg	450	150	2
2-Nitrophenol	ND		ug/kg	970	170	2
4-Nitrophenol	ND		ug/kg	630	180	2
2,4-Dinitrophenol	ND		ug/kg	2200	210	2
4,6-Dinitro-o-cresol	ND		ug/kg	1200	220	2
Pentachlorophenol	ND		ug/kg	360	99.	2
Phenol	160	J	ug/kg	450	68.	2
2-Methylphenol	86	J	ug/kg	450	70.	2
3-Methylphenol/4-Methylphenol	380	J	ug/kg	650	70.	2

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02 D
 Client ID: RB10_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	450	86.	2
Benzoic Acid	ND		ug/kg	1500	460	2
Benzyl Alcohol	ND		ug/kg	450	140	2
Carbazole	410	J	ug/kg	450	44.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	97		10-136
4-Terphenyl-d14	75		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
 Client ID: RB10_33-35
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 14:23
 Analyst: IM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	200	19.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	49.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-03

Date Collected: 01/08/19 11:40

Client ID: RB10_33-35

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	ND		ug/kg	200	18.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
 Client ID: RB10_33-35
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	ND		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	86		30-120
2,4,6-Tribromophenol	87		10-136
4-Terphenyl-d14	83		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-04 D
 Client ID: RB15_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 17:15
 Analyst: EK
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	210	J	ug/kg	300	39.	2
1,2,4-Trichlorobenzene	ND		ug/kg	380	43.	2
Hexachlorobenzene	ND		ug/kg	220	42.	2
Bis(2-chloroethyl)ether	ND		ug/kg	340	51.	2
2-Chloronaphthalene	ND		ug/kg	380	37.	2
1,2-Dichlorobenzene	ND		ug/kg	380	67.	2
1,3-Dichlorobenzene	ND		ug/kg	380	65.	2
1,4-Dichlorobenzene	ND		ug/kg	380	66.	2
3,3'-Dichlorobenzidine	ND		ug/kg	380	100	2
2,4-Dinitrotoluene	ND		ug/kg	380	75.	2
2,6-Dinitrotoluene	ND		ug/kg	380	64.	2
Fluoranthene	2200		ug/kg	220	43.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	380	40.	2
4-Bromophenyl phenyl ether	ND		ug/kg	380	57.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	450	64.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	400	38.	2
Hexachlorobutadiene	ND		ug/kg	380	55.	2
Hexachlorocyclopentadiene	ND		ug/kg	1100	340	2
Hexachloroethane	ND		ug/kg	300	61.	2
Isophorone	ND		ug/kg	340	49.	2
Naphthalene	56	J	ug/kg	380	46.	2
Nitrobenzene	ND		ug/kg	340	56.	2
NDPA/DPA	ND		ug/kg	300	43.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	380	58.	2
Bis(2-ethylhexyl)phthalate	230	J	ug/kg	380	130	2
Butyl benzyl phthalate	ND		ug/kg	380	95.	2
Di-n-butylphthalate	94	J	ug/kg	380	71.	2
Di-n-octylphthalate	ND		ug/kg	380	130	2

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-04 D

Date Collected: 01/08/19 13:00

Client ID: RB15_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	380	35.	2
Dimethyl phthalate	ND		ug/kg	380	79.	2
Benzo(a)anthracene	940		ug/kg	220	42.	2
Benzo(a)pyrene	800		ug/kg	300	92.	2
Benzo(b)fluoranthene	1100		ug/kg	220	63.	2
Benzo(k)fluoranthene	330		ug/kg	220	60.	2
Chrysene	870		ug/kg	220	39.	2
Acenaphthylene	66	J	ug/kg	300	58.	2
Anthracene	480		ug/kg	220	73.	2
Benzo(ghi)perylene	550		ug/kg	300	44.	2
Fluorene	180	J	ug/kg	380	36.	2
Phenanthrene	1800		ug/kg	220	46.	2
Dibenzo(a,h)anthracene	120	J	ug/kg	220	43.	2
Indeno(1,2,3-cd)pyrene	590		ug/kg	300	52.	2
Pyrene	2000		ug/kg	220	37.	2
Biphenyl	ND		ug/kg	860	87.	2
4-Chloroaniline	ND		ug/kg	380	68.	2
2-Nitroaniline	ND		ug/kg	380	72.	2
3-Nitroaniline	ND		ug/kg	380	71.	2
4-Nitroaniline	ND		ug/kg	380	160	2
Dibenzofuran	100	J	ug/kg	380	36.	2
2-Methylnaphthalene	49	J	ug/kg	450	45.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	380	39.	2
Acetophenone	ND		ug/kg	380	46.	2
2,4,6-Trichlorophenol	ND		ug/kg	220	71.	2
p-Chloro-m-cresol	ND		ug/kg	380	56.	2
2-Chlorophenol	ND		ug/kg	380	44.	2
2,4-Dichlorophenol	ND		ug/kg	340	60.	2
2,4-Dimethylphenol	ND		ug/kg	380	120	2
2-Nitrophenol	ND		ug/kg	810	140	2
4-Nitrophenol	ND		ug/kg	520	150	2
2,4-Dinitrophenol	ND		ug/kg	1800	180	2
4,6-Dinitro-o-cresol	ND		ug/kg	980	180	2
Pentachlorophenol	ND		ug/kg	300	83.	2
Phenol	ND		ug/kg	380	57.	2
2-Methylphenol	ND		ug/kg	380	58.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	540	59.	2

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-04 D

Date Collected: 01/08/19 13:00

Client ID: RB15_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	380	72.	2
Benzoic Acid	ND		ug/kg	1200	380	2
Benzyl Alcohol	ND		ug/kg	380	110	2
Carbazole	120	J	ug/kg	380	36.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	18		10-136
4-Terphenyl-d14	72		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05
 Client ID: RB15_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:05
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/13/19 20:06
 Analyst: RC
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	28	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	30.	1
1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	750		ug/kg	100	19.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	150	1
Hexachloroethane	ND		ug/kg	140	27.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	39	J	ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-05

Date Collected: 01/08/19 13:05

Client ID: RB15_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	340		ug/kg	100	19.	1
Benzo(a)pyrene	360		ug/kg	140	41.	1
Benzo(b)fluoranthene	410		ug/kg	100	28.	1
Benzo(k)fluoranthene	140		ug/kg	100	27.	1
Chrysene	290		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	110		ug/kg	100	33.	1
Benzo(ghi)perylene	240		ug/kg	140	20.	1
Fluorene	34	J	ug/kg	170	16.	1
Phenanthrene	480		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	46	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	240		ug/kg	140	24.	1
Pyrene	650		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	39.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	20	J	ug/kg	170	16.	1
2-Methylnaphthalene	21	J	ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	370	64.	1
4-Nitrophenol	ND		ug/kg	240	69.	1
2,4-Dinitrophenol	ND		ug/kg	810	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	81.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05
 Client ID: RB15_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:05
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	32.	1
Benzoic Acid	ND		ug/kg	550	170	1
Benzyl Alcohol	ND		ug/kg	170	52.	1
Carbazole	32	J	ug/kg	170	16.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	87		10-136
4-Terphenyl-d14	78		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-06
 Client ID: RB15_23-25
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:15
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 14:48
 Analyst: IM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	21	J	ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	64	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	1500		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-06

Date Collected: 01/08/19 13:15

Client ID: RB15_23-25

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	24	J	ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	24.	1
Fluorene	23	J	ug/kg	200	19.	1
Phenanthrene	93	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	52	J	ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	83.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	1400		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	82.	1
2,4-Dinitrophenol	ND		ug/kg	960	93.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	96.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-06
 Client ID: RB15_23-25
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:15
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	650	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	ND		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	93		10-136
4-Terphenyl-d14	77		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
 Client ID: RB15_28-30
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 13:32
 Analyst: IM
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-07

Date Collected: 01/08/19 13:10

Client ID: RB15_28-30

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	ND		ug/kg	120	23.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	20.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	ND		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	83.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	440	76.	1
4-Nitrophenol	ND		ug/kg	280	82.	1
2,4-Dinitrophenol	ND		ug/kg	970	94.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	97.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	32.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
 Client ID: RB15_28-30
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	39.	1
Benzoic Acid	ND		ug/kg	650	200	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	ND		ug/kg	200	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	91		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	75		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
 Client ID: RB16_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/15/19 13:26
 Analyst: JG
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 01/14/19 16:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	48	J	ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	20.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
1,2-Dichlorobenzene	ND		ug/kg	170	31.	1
1,3-Dichlorobenzene	ND		ug/kg	170	30.	1
1,4-Dichlorobenzene	ND		ug/kg	170	30.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	760		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	490	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	22.	1
Naphthalene	56	J	ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	44.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	59.	1

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-08

Date Collected: 01/08/19 10:40

Client ID: RB16_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	500		ug/kg	100	19.	1
Benzo(a)pyrene	450		ug/kg	140	42.	1
Benzo(b)fluoranthene	600		ug/kg	100	29.	1
Benzo(k)fluoranthene	190		ug/kg	100	28.	1
Chrysene	570		ug/kg	100	18.	1
Acenaphthylene	41	J	ug/kg	140	27.	1
Anthracene	130		ug/kg	100	34.	1
Benzo(ghi)perylene	320		ug/kg	140	20.	1
Fluorene	47	J	ug/kg	170	17.	1
Phenanthrene	660		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	75	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	300		ug/kg	140	24.	1
Pyrene	960		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	40.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	33.	1
4-Nitroaniline	ND		ug/kg	170	72.	1
Dibenzofuran	24	J	ug/kg	170	16.	1
2-Methylnaphthalene	48	J	ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	21	J	ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	370	65.	1
4-Nitrophenol	ND		ug/kg	240	70.	1
2,4-Dinitrophenol	ND		ug/kg	830	80.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	83.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
 Client ID: RB16_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	560	170	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	40	J	ug/kg	170	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		25-120
Phenol-d6	54		10-120
Nitrobenzene-d5	40		23-120
2-Fluorobiphenyl	65		30-120
2,4,6-Tribromophenol	22		10-136
4-Terphenyl-d14	65		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09 D
 Client ID: RB16_13-15
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 17:41
 Analyst: EK
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	270	J	ug/kg	290	38.	2
1,2,4-Trichlorobenzene	ND		ug/kg	360	42.	2
Hexachlorobenzene	ND		ug/kg	220	41.	2
Bis(2-chloroethyl)ether	ND		ug/kg	330	50.	2
2-Chloronaphthalene	ND		ug/kg	360	36.	2
1,2-Dichlorobenzene	ND		ug/kg	360	66.	2
1,3-Dichlorobenzene	ND		ug/kg	360	63.	2
1,4-Dichlorobenzene	ND		ug/kg	360	64.	2
3,3'-Dichlorobenzidine	ND		ug/kg	360	97.	2
2,4-Dinitrotoluene	ND		ug/kg	360	73.	2
2,6-Dinitrotoluene	ND		ug/kg	360	63.	2
Fluoranthene	2800		ug/kg	220	42.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	360	39.	2
4-Bromophenyl phenyl ether	ND		ug/kg	360	56.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	440	62.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	390	37.	2
Hexachlorobutadiene	ND		ug/kg	360	54.	2
Hexachlorocyclopentadiene	ND		ug/kg	1000	330	2
Hexachloroethane	ND		ug/kg	290	59.	2
Isophorone	ND		ug/kg	330	47.	2
Naphthalene	760		ug/kg	360	44.	2
Nitrobenzene	ND		ug/kg	330	54.	2
NDPA/DPA	ND		ug/kg	290	42.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	360	56.	2
Bis(2-ethylhexyl)phthalate	ND		ug/kg	360	130	2
Butyl benzyl phthalate	ND		ug/kg	360	92.	2
Di-n-butylphthalate	ND		ug/kg	360	69.	2
Di-n-octylphthalate	ND		ug/kg	360	120	2

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-09 D

Date Collected: 01/08/19 10:45

Client ID: RB16_13-15

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	360	34.	2
Dimethyl phthalate	ND		ug/kg	360	77.	2
Benzo(a)anthracene	1300		ug/kg	220	41.	2
Benzo(a)pyrene	1300		ug/kg	290	89.	2
Benzo(b)fluoranthene	1600		ug/kg	220	62.	2
Benzo(k)fluoranthene	490		ug/kg	220	58.	2
Chrysene	1200		ug/kg	220	38.	2
Acenaphthylene	120	J	ug/kg	290	56.	2
Anthracene	600		ug/kg	220	71.	2
Benzo(ghi)perylene	820		ug/kg	290	43.	2
Fluorene	200	J	ug/kg	360	36.	2
Phenanthrene	2300		ug/kg	220	44.	2
Dibenzo(a,h)anthracene	190	J	ug/kg	220	42.	2
Indeno(1,2,3-cd)pyrene	870		ug/kg	290	51.	2
Pyrene	2800		ug/kg	220	36.	2
Biphenyl	ND		ug/kg	830	85.	2
4-Chloroaniline	ND		ug/kg	360	66.	2
2-Nitroaniline	ND		ug/kg	360	70.	2
3-Nitroaniline	ND		ug/kg	360	69.	2
4-Nitroaniline	ND		ug/kg	360	150	2
Dibenzofuran	160	J	ug/kg	360	34.	2
2-Methylnaphthalene	140	J	ug/kg	440	44.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	360	38.	2
Acetophenone	ND		ug/kg	360	45.	2
2,4,6-Trichlorophenol	ND		ug/kg	220	69.	2
p-Chloro-m-cresol	ND		ug/kg	360	54.	2
2-Chlorophenol	ND		ug/kg	360	43.	2
2,4-Dichlorophenol	ND		ug/kg	330	59.	2
2,4-Dimethylphenol	ND		ug/kg	360	120	2
2-Nitrophenol	ND		ug/kg	790	140	2
4-Nitrophenol	ND		ug/kg	510	150	2
2,4-Dinitrophenol	ND		ug/kg	1800	170	2
4,6-Dinitro-o-cresol	ND		ug/kg	950	180	2
Pentachlorophenol	ND		ug/kg	290	80.	2
Phenol	ND		ug/kg	360	55.	2
2-Methylphenol	ND		ug/kg	360	57.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	530	57.	2

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09 D
 Client ID: RB16_13-15
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	360	70.	2
Benzoic Acid	ND		ug/kg	1200	370	2
Benzyl Alcohol	ND		ug/kg	360	110	2
Carbazole	140	J	ug/kg	360	36.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	94		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	67		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
 Client ID: RB16_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 22:07
 Analyst: EK
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	210		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	500		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
 Client ID: RB16_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	130		ug/kg	120	22.	1
Benzo(a)pyrene	110	J	ug/kg	160	48.	1
Benzo(b)fluoranthene	140		ug/kg	120	33.	1
Benzo(k)fluoranthene	36	J	ug/kg	120	31.	1
Chrysene	120		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	44	J	ug/kg	120	38.	1
Benzo(ghi)perylene	70	J	ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	190		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	78	J	ug/kg	160	27.	1
Pyrene	190		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	33	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	210		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
 Client ID: RB16_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	ND		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	90		25-120
Phenol-d6	88		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	95		30-120
2,4,6-Tribromophenol	117		10-136
4-Terphenyl-d14	67		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
 Client ID: SODUP05_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 01/11/19 13:57
 Analyst: IM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	68	J	ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
 Client ID: SODUP05_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	ND		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	100	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	95.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
 Client ID: SODUP05_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	ND		ug/kg	200	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	60		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270D
 Analytical Date: 01/14/19 20:48
 Analyst: SZ

Extraction Method: EPA 3510C
 Extraction Date: 01/09/19 07:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/l	2.0	0.44	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Hexachlorobenzene	ND		ug/l	2.0	0.46	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
2-Chloronaphthalene	ND		ug/l	2.0	0.44	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
Fluoranthene	ND		ug/l	2.0	0.26	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorobutadiene	ND		ug/l	2.0	0.66	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Hexachloroethane	ND		ug/l	2.0	0.58	1
Isophorone	ND		ug/l	5.0	1.2	1
Naphthalene	ND		ug/l	2.0	0.46	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
Client ID: SOFB04_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37	1
Chrysene	ND		ug/l	2.0	0.34	1
Acenaphthylene	ND		ug/l	2.0	0.46	1
Anthracene	ND		ug/l	2.0	0.33	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1
Fluorene	ND		ug/l	2.0	0.41	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40	1
Pyrene	ND		ug/l	2.0	0.28	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
2-Methylnaphthalene	ND		ug/l	2.0	0.45	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Pentachlorophenol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	24		10-120
4-Terphenyl-d14	64		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/09/19 16:51
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1195687-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/09/19 16:51
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1195687-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/09/19 16:51
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 10:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 12 Batch: WG1195687-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	79		41-149

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/10/19 13:45
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 01/09/19 11:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09-11 Batch: WG1196039-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 01/10/19 13:45
 Analyst: SZ

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 11:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09-11 Batch: WG1196039-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	27.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/10/19 13:45
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 01/09/19 11:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-07,09-11 Batch: WG1196039-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	530	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	93		10-136
4-Terphenyl-d14	82		18-120

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/15/19 09:27
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 01/14/19 04:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1197293-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/15/19 09:27
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 01/14/19 04:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1197293-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 01/15/19 09:27
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 01/14/19 04:49

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1197293-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		25-120
Phenol-d6	66		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	73		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1195687-2 WG1195687-3								
Acenaphthene	65		71		37-111	9		30
1,2,4-Trichlorobenzene	61		70		39-98	14		30
Hexachlorobenzene	72		75		40-140	4		30
Bis(2-chloroethyl)ether	56		73		40-140	26		30
2-Chloronaphthalene	67		79		40-140	16		30
1,2-Dichlorobenzene	57		70		40-140	20		30
1,3-Dichlorobenzene	54		69		40-140	24		30
1,4-Dichlorobenzene	53		68		36-97	25		30
3,3'-Dichlorobenzidine	74		83		40-140	11		30
2,4-Dinitrotoluene	75		78		48-143	4		30
2,6-Dinitrotoluene	84		83		40-140	1		30
Fluoranthene	77		82		40-140	6		30
4-Chlorophenyl phenyl ether	72		70		40-140	3		30
4-Bromophenyl phenyl ether	74		82		40-140	10		30
Bis(2-chloroisopropyl)ether	61		76		40-140	22		30
Bis(2-chloroethoxy)methane	72		79		40-140	9		30
Hexachlorobutadiene	50		70		40-140	33	Q	30
Hexachlorocyclopentadiene	53		71		40-140	29		30
Hexachloroethane	56		67		40-140	18		30
Isophorone	70		84		40-140	18		30
Naphthalene	58		74		40-140	24		30
Nitrobenzene	62		73		40-140	16		30
NDPA/DPA	78		75		40-140	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS	Qual	LCS	Qual	%Recovery	RPD	Qual	RPD
	%Recovery		%Recovery		Limits			Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1195687-2 WG1195687-3								
n-Nitrosodi-n-propylamine	68		82		29-132			30
Bis(2-ethylhexyl)phthalate	88		99		40-140			30
Butyl benzyl phthalate	99		105		40-140			30
Di-n-butylphthalate	79		83		40-140			30
Di-n-octylphthalate	99		100		40-140			30
Diethyl phthalate	79		76		40-140			30
Dimethyl phthalate	83		81		40-140			30
Benzo(a)anthracene	81		88		40-140			30
Benzo(a)pyrene	84		86		40-140			30
Benzo(b)fluoranthene	84		87		40-140			30
Benzo(k)fluoranthene	87		93		40-140			30
Chrysene	79		84		40-140			30
Acenaphthylene	73		77		45-123			30
Anthracene	76		85		40-140			30
Benzo(ghi)perylene	80		100		40-140			30
Fluorene	73		70		40-140			30
Phenanthrene	76		80		40-140			30
Dibenzo(a,h)anthracene	80		95		40-140			30
Indeno(1,2,3-cd)pyrene	78		91		40-140			30
Pyrene	75		82		26-127			30
Biphenyl	64		75		40-140			30
4-Chloroaniline	60		72		40-140			30
2-Nitroaniline	84		88		52-143			30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1195687-2 WG1195687-3								
3-Nitroaniline	70		79		25-145	12		30
4-Nitroaniline	79		71		51-143	11		30
Dibenzofuran	70		74		40-140	6		30
2-Methylnaphthalene	62		79		40-140	24		30
1,2,4,5-Tetrachlorobenzene	59		72		2-134	20		30
Acetophenone	63		78		39-129	21		30
2,4,6-Trichlorophenol	78		88		30-130	12		30
p-Chloro-m-cresol	83		90		23-97	8		30
2-Chlorophenol	61		77		27-123	23		30
2,4-Dichlorophenol	80		81		30-130	1		30
2,4-Dimethylphenol	48		58		30-130	19		30
2-Nitrophenol	67		83		30-130	21		30
4-Nitrophenol	73		74		10-80	1		30
2,4-Dinitrophenol	80		82		20-130	2		30
4,6-Dinitro-o-cresol	77		76		20-164	1		30
Pentachlorophenol	80		81		9-103	1		30
Phenol	52		63		12-110	19		30
2-Methylphenol	66		78		30-130	17		30
3-Methylphenol/4-Methylphenol	75		85		30-130	13		30
2,4,5-Trichlorophenol	82		86		30-130	5		30
Benzoic Acid	66		64		10-164	3		30
Benzyl Alcohol	68		76		26-116	11		30
Carbazole	84		89		55-144	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1195687-2 WG1195687-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	62		68		21-120
Phenol-d6	52		61		10-120
Nitrobenzene-d5	61		75		23-120
2-Fluorobiphenyl	69		79		15-120
2,4,6-Tribromophenol	83		76		10-120
4-Terphenyl-d14	70		73		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 Batch: WG1196039-2 WG1196039-3								
Acenaphthene	92		97		31-137	5		50
1,2,4-Trichlorobenzene	77		95		38-107	21		50
Hexachlorobenzene	94		100		40-140	6		50
Bis(2-chloroethyl)ether	77		79		40-140	3		50
2-Chloronaphthalene	77		86		40-140	11		50
1,2-Dichlorobenzene	72		77		40-140	7		50
1,3-Dichlorobenzene	72		76		40-140	5		50
1,4-Dichlorobenzene	72		77		28-104	7		50
3,3'-Dichlorobenzidine	52		53		40-140	2		50
2,4-Dinitrotoluene	109		116		40-132	6		50
2,6-Dinitrotoluene	105		94		40-140	11		50
Fluoranthene	83		107		40-140	25		50
4-Chlorophenyl phenyl ether	78		94		40-140	19		50
4-Bromophenyl phenyl ether	95		101		40-140	6		50
Bis(2-chloroisopropyl)ether	72		88		40-140	20		50
Bis(2-chloroethoxy)methane	81		102		40-117	23		50
Hexachlorobutadiene	74		78		40-140	5		50
Hexachlorocyclopentadiene	78		80		40-140	3		50
Hexachloroethane	75		94		40-140	22		50
Isophorone	85		107		40-140	23		50
Naphthalene	77		82		40-140	6		50
Nitrobenzene	79		101		40-140	24		50
NDPA/DPA	90		103		36-157	13		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 Batch: WG1196039-2 WG1196039-3								
n-Nitrosodi-n-propylamine	82		104		32-121	24		50
Bis(2-ethylhexyl)phthalate	93		100		40-140	7		50
Butyl benzyl phthalate	106		110		40-140	4		50
Di-n-butylphthalate	98		122		40-140	22		50
Di-n-octylphthalate	90		103		40-140	13		50
Diethyl phthalate	93		105		40-140	12		50
Dimethyl phthalate	97		87		40-140	11		50
Benzo(a)anthracene	83		86		40-140	4		50
Benzo(a)pyrene	77		113		40-140	38		50
Benzo(b)fluoranthene	80		110		40-140	32		50
Benzo(k)fluoranthene	75		110		40-140	38		50
Chrysene	85		86		40-140	1		50
Acenaphthylene	95		86		40-140	10		50
Anthracene	89		91		40-140	2		50
Benzo(ghi)perylene	88		90		40-140	2		50
Fluorene	86		104		40-140	19		50
Phenanthrene	85		88		40-140	3		50
Dibenzo(a,h)anthracene	100		88		40-140	13		50
Indeno(1,2,3-cd)pyrene	101		89		40-140	13		50
Pyrene	86		105		35-142	20		50
Biphenyl	81		90		54-104	11		50
4-Chloroaniline	44		44		40-140	0		50
2-Nitroaniline	86		96		47-134	11		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 Batch: WG1196039-2 WG1196039-3								
3-Nitroaniline	71		71		26-129	0		50
4-Nitroaniline	90		106		41-125	16		50
Dibenzofuran	90		96		40-140	6		50
2-Methylnaphthalene	81		86		40-140	6		50
1,2,4,5-Tetrachlorobenzene	83		86		40-117	4		50
Acetophenone	85		107		14-144	23		50
2,4,6-Trichlorophenol	91		94		30-130	3		50
p-Chloro-m-cresol	92		94		26-103	2		50
2-Chlorophenol	84		88		25-102	5		50
2,4-Dichlorophenol	88		108		30-130	20		50
2,4-Dimethylphenol	90		110		30-130	20		50
2-Nitrophenol	88		108		30-130	20		50
4-Nitrophenol	106		110		11-114	4		50
2,4-Dinitrophenol	109		113		4-130	4		50
4,6-Dinitro-o-cresol	106		117		10-130	10		50
Pentachlorophenol	91		96		17-109	5		50
Phenol	80		84		26-90	5		50
2-Methylphenol	84		99		30-130.	16		50
3-Methylphenol/4-Methylphenol	84		106		30-130	23		50
2,4,5-Trichlorophenol	92		93		30-130	1		50
Benzoic Acid	87		97		10-110	11		50
Benzyl Alcohol	88		93		40-140	6		50
Carbazole	90		97		54-128	7		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 Batch: WG1196039-2 WG1196039-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	85		91		25-120
Phenol-d6	86		91		10-120
Nitrobenzene-d5	81		104		23-120
2-Fluorobiphenyl	82		86		30-120
2,4,6-Tribromophenol	102		113		10-136
4-Terphenyl-d14	72		91		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1197293-2 WG1197293-3								
Acenaphthene	64		64		31-137	0		50
1,2,4-Trichlorobenzene	72		72		38-107	0		50
Hexachlorobenzene	78		75		40-140	4		50
Bis(2-chloroethyl)ether	68		67		40-140	1		50
2-Chloronaphthalene	81		79		40-140	3		50
1,2-Dichlorobenzene	69		66		40-140	4		50
1,3-Dichlorobenzene	67		66		40-140	2		50
1,4-Dichlorobenzene	68		65		28-104	5		50
3,3'-Dichlorobenzidine	47		48		40-140	2		50
2,4-Dinitrotoluene	71		68		40-132	4		50
2,6-Dinitrotoluene	87		83		40-140	5		50
Fluoranthene	80		76		40-140	5		50
4-Chlorophenyl phenyl ether	68		66		40-140	3		50
4-Bromophenyl phenyl ether	74		72		40-140	3		50
Bis(2-chloroisopropyl)ether	67		67		40-140	0		50
Bis(2-chloroethoxy)methane	75		73		40-117	3		50
Hexachlorobutadiene	75		75		40-140	0		50
Hexachlorocyclopentadiene	69		68		40-140	1		50
Hexachloroethane	66		65		40-140	2		50
Isophorone	78		74		40-140	5		50
Naphthalene	71		72		40-140	1		50
Nitrobenzene	71		70		40-140	1		50
NDPA/DPA	70		68		36-157	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1197293-2 WG1197293-3								
n-Nitrosodi-n-propylamine	75		73		32-121	3		50
Bis(2-ethylhexyl)phthalate	77		74		40-140	4		50
Butyl benzyl phthalate	83		78		40-140	6		50
Di-n-butylphthalate	83		79		40-140	5		50
Di-n-octylphthalate	78		74		40-140	5		50
Diethyl phthalate	70		67		40-140	4		50
Dimethyl phthalate	89		83		40-140	7		50
Benzo(a)anthracene	73		69		40-140	6		50
Benzo(a)pyrene	76		73		40-140	4		50
Benzo(b)fluoranthene	75		73		40-140	3		50
Benzo(k)fluoranthene	78		73		40-140	7		50
Chrysene	73		69		40-140	6		50
Acenaphthylene	85		82		40-140	4		50
Anthracene	78		73		40-140	7		50
Benzo(ghi)perylene	76		73		40-140	4		50
Fluorene	70		68		40-140	3		50
Phenanthrene	73		69		40-140	6		50
Dibenzo(a,h)anthracene	75		72		40-140	4		50
Indeno(1,2,3-cd)pyrene	76		73		40-140	4		50
Pyrene	80		76		35-142	5		50
Biphenyl	82		80		54-104	2		50
4-Chloroaniline	45		46		40-140	2		50
2-Nitroaniline	89		83		47-134	7		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1197293-2 WG1197293-3								
3-Nitroaniline	44		43		26-129	2		50
4-Nitroaniline	62		57		41-125	8		50
Dibenzofuran	68		66		40-140	3		50
2-Methylnaphthalene	76		76		40-140	0		50
1,2,4,5-Tetrachlorobenzene	82		82		40-117	0		50
Acetophenone	73		72		14-144	1		50
2,4,6-Trichlorophenol	91		87		30-130	4		50
p-Chloro-m-cresol	89		86		26-103	3		50
2-Chlorophenol	77		75		25-102	3		50
2,4-Dichlorophenol	86		84		30-130	2		50
2,4-Dimethylphenol	87		83		30-130	5		50
2-Nitrophenol	78		76		30-130	3		50
4-Nitrophenol	83		79		11-114	5		50
2,4-Dinitrophenol	69		67		4-130	3		50
4,6-Dinitro-o-cresol	74		69		10-130	7		50
Pentachlorophenol	78		73		17-109	7		50
Phenol	74		72		26-90	3		50
2-Methylphenol	78		78		30-130.	0		50
3-Methylphenol/4-Methylphenol	80		82		30-130	2		50
2,4,5-Trichlorophenol	95		89		30-130	7		50
Benzoic Acid	84		80		10-110	5		50
Benzyl Alcohol	81		79		40-140	3		50
Carbazole	78		74		54-128	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1197293-2 WG1197293-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	74		72		25-120
Phenol-d6	78		77		10-120
Nitrobenzene-d5	74		73		23-120
2-Fluorobiphenyl	84		81		30-120
2,4,6-Tribromophenol	85		80		10-136
4-Terphenyl-d14	82		78		18-120

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 QC Batch ID: WG1196039-4 WG1196039-5 QC Sample: L1900879-03 Client ID: RB10_33-35												
Acenaphthene	ND	1570	1200	76		1400	89		31-137	15		50
1,2,4-Trichlorobenzene	ND	1570	1200	76		1400	89		38-107	15		50
Hexachlorobenzene	ND	1570	1200	76		1400	89		40-140	15		50
Bis(2-chloroethyl)ether	ND	1570	960	61		1100	70		40-140	14		50
2-Chloronaphthalene	ND	1570	1200	76		1400	89		40-140	15		50
1,2-Dichlorobenzene	ND	1570	1100	70		1300	83		40-140	17		50
1,3-Dichlorobenzene	ND	1570	1100	70		1300	83		40-140	17		50
1,4-Dichlorobenzene	ND	1570	1100	70		1300	83		28-104	17		50
3,3'-Dichlorobenzidine	ND	1570	920	59		1000	64		40-140	8		50
2,4-Dinitrotoluene	ND	1570	1300	83		1500	96		40-132	14		50
2,6-Dinitrotoluene	ND	1570	1300	83		1500	96		40-140	14		50
Fluoranthene	ND	1570	1200	76		1500	96		40-140	22		50
4-Chlorophenyl phenyl ether	ND	1570	1200	76		1400	89		40-140	15		50
4-Bromophenyl phenyl ether	ND	1570	1300	83		1400	89		40-140	7		50
Bis(2-chloroisopropyl)ether	ND	1570	1100	70		1200	77		40-140	9		50
Bis(2-chloroethoxy)methane	ND	1570	1000	64		1200	77		40-117	18		50
Hexachlorobutadiene	ND	1570	1200	76		1400	89		40-140	15		50
Hexachlorocyclopentadiene	ND	1570	960	61		1100	70		40-140	14		50
Hexachloroethane	ND	1570	1100	70		1200	77		40-140	9		50
Isophorone	ND	1570	1000	64		1200	77		40-140	18		50
Naphthalene	ND	1570	1100	70		1300	83		40-140	17		50
Nitrobenzene	ND	1570	980	62		1200	77		40-140	20		50
NDPA/DPA	ND	1570	1200	76		1500	96		36-157	22		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 QC Batch ID: WG1196039-4 WG1196039-5 QC Sample: L1900879-03 Client ID: RB10_33-35												
n-Nitrosodi-n-propylamine	ND	1570	1000	64		1200	77		32-121	18		50
Bis(2-ethylhexyl)phthalate	ND	1570	1400	89		1600	100		40-140	13		50
Butyl benzyl phthalate	ND	1570	1300	83		1500	96		40-140	14		50
Di-n-butylphthalate	ND	1570	1300	83		1600	100		40-140	21		50
Di-n-octylphthalate	ND	1570	1400	89		1600	100		40-140	13		50
Diethyl phthalate	ND	1570	1200	76		1400	89		40-140	15		50
Dimethyl phthalate	ND	1570	1200	76		1400	89		40-140	15		50
Benzo(a)anthracene	ND	1570	1200	76		1400	89		40-140	15		50
Benzo(a)pyrene	ND	1570	1200	76		1400	89		40-140	15		50
Benzo(b)fluoranthene	ND	1570	1200	76		1400	89		40-140	15		50
Benzo(k)fluoranthene	ND	1570	1200	76		1400	89		40-140	15		50
Chrysene	ND	1570	1200	76		1400	89		40-140	15		50
Acenaphthylene	ND	1570	1200	76		1400	89		40-140	15		50
Anthracene	ND	1570	1200	76		1500	96		40-140	22		50
Benzo(ghi)perylene	ND	1570	1200	76		1400	89		40-140	15		50
Fluorene	ND	1570	1200	76		1400	89		40-140	15		50
Phenanthrene	ND	1570	1200	76		1400	89		40-140	15		50
Dibenzo(a,h)anthracene	ND	1570	1200	76		1400	89		40-140	15		50
Indeno(1,2,3-cd)pyrene	ND	1570	1200	76		1400	89		40-140	15		50
Pyrene	ND	1570	1200	76		1400	89		35-142	15		50
Biphenyl	ND	1570	1200	76		1400	89		54-104	15		50
4-Chloroaniline	ND	1570	670	43		670	43		40-140	0		50
2-Nitroaniline	ND	1570	1400	89		1500	96		47-134	7		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 QC Batch ID: WG1196039-4 WG1196039-5 QC Sample: L1900879-03 Client ID: RB10_33-35												
3-Nitroaniline	ND	1570	940	60		1000	64		26-129	6		50
4-Nitroaniline	ND	1570	1200	76		1400	89		41-125	15		50
Dibenzofuran	ND	1570	1200	76		1400	89		40-140	15		50
2-Methylnaphthalene	ND	1570	1200	76		1400	89		40-140	15		50
1,2,4,5-Tetrachlorobenzene	ND	1570	1300	83		1500	96		40-117	14		50
Acetophenone	ND	1570	1100	70		1300	83		14-144	17		50
2,4,6-Trichlorophenol	ND	1570	1400	89		1500	96		30-130	7		50
p-Chloro-m-cresol	ND	1570	1200	76		1400	89		26-103	15		50
2-Chlorophenol	ND	1570	1200	76		1400	89		25-102	15		50
2,4-Dichlorophenol	ND	1570	1300	83		1500	96		30-130	14		50
2,4-Dimethylphenol	ND	1570	1200	76		1400	89		30-130	15		50
2-Nitrophenol	ND	1570	1300	83		1500	96		30-130	14		50
4-Nitrophenol	ND	1570	1200	76		1300	83		11-114	8		50
2,4-Dinitrophenol	ND	1570	480J	31		630J	40		4-130	27		50
4,6-Dinitro-o-cresol	ND	1570	990	63		1200	77		10-130	19		50
Pentachlorophenol	ND	1570	1200	76		1500	96		17-109	22		50
Phenol	ND	1570	1000	64		1200	77		26-90	18		50
2-Methylphenol	ND	1570	1100	70		1300	83		30-130.	17		50
3-Methylphenol/4-Methylphenol	ND	1570	1200	76		1400	89		30-130	15		50
2,4,5-Trichlorophenol	ND	1570	1400	89		1600	100		30-130	13		50
Benzoic Acid	ND	1570	ND	0	Q	ND	0	Q	10-110	NC		50
Benzyl Alcohol	ND	1570	1000	64		1200	77		40-140	18		50
Carbazole	ND	1570	1200	76		1500	96		54-128	22		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 QC Batch ID: WG1196039-4 WG1196039-5 QC Sample: L1900879-03
 Client ID: RB10_33-35

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	79		91		10-136
2-Fluorobiphenyl	78		89		30-120
2-Fluorophenol	71		82		25-120
4-Terphenyl-d14	76		91		18-120
Nitrobenzene-d5	65		75		23-120
Phenol-d6	68		79		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 QC Batch ID: WG1196039-6 WG1196039-7 QC Sample: L1900879-07 Client ID: RB15_28-30												
Acenaphthene	ND	1610	1200	75		1200	75		31-137	0		50
1,2,4-Trichlorobenzene	ND	1610	1200	75		1200	75		38-107	0		50
Hexachlorobenzene	ND	1610	1200	75		1200	75		40-140	0		50
Bis(2-chloroethyl)ether	ND	1610	970	60		950	59		40-140	2		50
2-Chloronaphthalene	ND	1610	1200	75		1200	75		40-140	0		50
1,2-Dichlorobenzene	ND	1610	1100	68		1100	69		40-140	0		50
1,3-Dichlorobenzene	ND	1610	1100	68		1100	69		40-140	0		50
1,4-Dichlorobenzene	ND	1610	1100	68		1100	69		28-104	0		50
3,3'-Dichlorobenzidine	ND	1610	940	58		920	58		40-140	2		50
2,4-Dinitrotoluene	ND	1610	1200	75		1100	69		40-132	9		50
2,6-Dinitrotoluene	ND	1610	1100	68		1100	69		40-140	0		50
Fluoranthene	ND	1610	1200	75		1200	75		40-140	0		50
4-Chlorophenyl phenyl ether	ND	1610	1200	75		1200	75		40-140	0		50
4-Bromophenyl phenyl ether	ND	1610	1200	75		1200	75		40-140	0		50
Bis(2-chloroisopropyl)ether	ND	1610	1100	68		1100	69		40-140	0		50
Bis(2-chloroethoxy)methane	ND	1610	990	62		1000	63		40-117	1		50
Hexachlorobutadiene	ND	1610	1200	75		1200	75		40-140	0		50
Hexachlorocyclopentadiene	ND	1610	930	58		920	58		40-140	1		50
Hexachloroethane	ND	1610	1000	62		1100	69		40-140	10		50
Isophorone	ND	1610	1000	62		1000	63		40-140	0		50
Naphthalene	ND	1610	1100	68		1100	69		40-140	0		50
Nitrobenzene	ND	1610	960	60		990	62		40-140	3		50
NDPA/DPA	ND	1610	1200	75		1200	75		36-157	0		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 QC Batch ID: WG1196039-6 WG1196039-7 QC Sample: L1900879-07 Client ID: RB15_28-30												
n-Nitrosodi-n-propylamine	ND	1610	980	61		1000	63		32-121	2		50
Bis(2-ethylhexyl)phthalate	ND	1610	1300	81		1400	88		40-140	7		50
Butyl benzyl phthalate	ND	1610	1200	75		1300	81		40-140	8		50
Di-n-butylphthalate	ND	1610	1300	81		1300	81		40-140	0		50
Di-n-octylphthalate	ND	1610	1300	81		1400	88		40-140	7		50
Diethyl phthalate	ND	1610	1200	75		1200	75		40-140	0		50
Dimethyl phthalate	ND	1610	1200	75		1200	75		40-140	0		50
Benzo(a)anthracene	ND	1610	1100	68		1200	75		40-140	9		50
Benzo(a)pyrene	ND	1610	1200	75		1200	75		40-140	0		50
Benzo(b)fluoranthene	ND	1610	1100	68		1200	75		40-140	9		50
Benzo(k)fluoranthene	ND	1610	1200	75		1200	75		40-140	0		50
Chrysene	ND	1610	1100	68		1200	75		40-140	9		50
Acenaphthylene	ND	1610	1200	75		1200	75		40-140	0		50
Anthracene	ND	1610	1200	75		1200	75		40-140	0		50
Benzo(ghi)perylene	ND	1610	1100	68		1100	69		40-140	0		50
Fluorene	ND	1610	1200	75		1200	75		40-140	0		50
Phenanthrene	ND	1610	1200	75		1200	75		40-140	0		50
Dibenzo(a,h)anthracene	ND	1610	1200	75		1200	75		40-140	0		50
Indeno(1,2,3-cd)pyrene	ND	1610	1200	75		1200	75		40-140	0		50
Pyrene	ND	1610	1200	75		1200	75		35-142	0		50
Biphenyl	ND	1610	1200	75		1200	75		54-104	0		50
4-Chloroaniline	ND	1610	660	41		620	39	Q	40-140	6		50
2-Nitroaniline	ND	1610	1300	81		1400	88		47-134	7		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 QC Batch ID: WG1196039-6 WG1196039-7 QC Sample: L1900879-07 Client ID: RB15_28-30												
3-Nitroaniline	ND	1610	800	50		790	49		26-129	1		50
4-Nitroaniline	ND	1610	1100	68		1200	75		41-125	9		50
Dibenzofuran	ND	1610	1200	75		1200	75		40-140	0		50
2-Methylnaphthalene	ND	1610	1200	75		1200	75		40-140	0		50
1,2,4,5-Tetrachlorobenzene	ND	1610	1200	75		1200	75		40-117	0		50
Acetophenone	ND	1610	1100	68		1100	69		14-144	0		50
2,4,6-Trichlorophenol	ND	1610	1300	81		1300	81		30-130	0		50
p-Chloro-m-cresol	ND	1610	1100	68		1200	75		26-103	9		50
2-Chlorophenol	ND	1610	1200	75		1200	75		25-102	0		50
2,4-Dichlorophenol	ND	1610	1300	81		1300	81		30-130	0		50
2,4-Dimethylphenol	ND	1610	1100	68		1200	75		30-130	9		50
2-Nitrophenol	ND	1610	1100	68		1100	69		30-130	0		50
4-Nitrophenol	ND	1610	1100	68		1100	69		11-114	0		50
2,4-Dinitrophenol	ND	1610	210J	13		270J	17		4-130	25		50
4,6-Dinitro-o-cresol	ND	1610	630	39		600	38		10-130	5		50
Pentachlorophenol	ND	1610	1100	68		1200	75		17-109	9		50
Phenol	ND	1610	1000	62		1000	63		26-90	0		50
2-Methylphenol	ND	1610	1100	68		1100	69		30-130.	0		50
3-Methylphenol/4-Methylphenol	ND	1610	1200	75		1200	75		30-130	0		50
2,4,5-Trichlorophenol	ND	1610	1300	81		1400	88		30-130	7		50
Benzoic Acid	ND	1610	470J	29		430J	27		10-110	9		50
Benzyl Alcohol	ND	1610	1000	62		1000	63		40-140	0		50
Carbazole	ND	1610	1200	75		1200	75		54-128	0		50

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07,09-11 QC Batch ID: WG1196039-6 WG1196039-7 QC Sample: L1900879-07
 Client ID: RB15_28-30

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,6-Tribromophenol	73		75		10-136
2-Fluorobiphenyl	74		74		30-120
2-Fluorophenol	69		70		25-120
4-Terphenyl-d14	71		74		18-120
Nitrobenzene-d5	60		61		23-120
Phenol-d6	66		67		10-120

PCBS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01
 Client ID: RB10_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 06:37
 Analyst: AWS
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.8	3.18	1	A
Aroclor 1221	ND		ug/kg	35.8	3.59	1	A
Aroclor 1232	ND		ug/kg	35.8	7.60	1	A
Aroclor 1242	ND		ug/kg	35.8	4.83	1	A
Aroclor 1248	ND		ug/kg	35.8	5.37	1	A
Aroclor 1254	ND		ug/kg	35.8	3.92	1	A
Aroclor 1260	ND		ug/kg	35.8	6.62	1	A
Aroclor 1262	ND		ug/kg	35.8	4.55	1	A
Aroclor 1268	ND		ug/kg	35.8	3.71	1	A
PCBs, Total	ND		ug/kg	35.8	3.18	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	51		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	48		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
 Client ID: RB10_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 06:51
 Analyst: AWS
 Percent Solids: 72%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	44.4	3.94	1	A
Aroclor 1221	ND		ug/kg	44.4	4.45	1	A
Aroclor 1232	ND		ug/kg	44.4	9.41	1	A
Aroclor 1242	ND		ug/kg	44.4	5.98	1	A
Aroclor 1248	ND		ug/kg	44.4	6.66	1	A
Aroclor 1254	ND		ug/kg	44.4	4.86	1	A
Aroclor 1260	ND		ug/kg	44.4	8.20	1	A
Aroclor 1262	ND		ug/kg	44.4	5.64	1	A
Aroclor 1268	ND		ug/kg	44.4	4.60	1	A
PCBs, Total	ND		ug/kg	44.4	3.94	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
 Client ID: RB10_33-35
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 04:29
 Analyst: AWS
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.1	3.47	1	A
Aroclor 1221	ND		ug/kg	39.1	3.92	1	A
Aroclor 1232	ND		ug/kg	39.1	8.28	1	A
Aroclor 1242	ND		ug/kg	39.1	5.27	1	A
Aroclor 1248	ND		ug/kg	39.1	5.86	1	A
Aroclor 1254	ND		ug/kg	39.1	4.28	1	A
Aroclor 1260	ND		ug/kg	39.1	7.22	1	A
Aroclor 1262	ND		ug/kg	39.1	4.96	1	A
Aroclor 1268	ND		ug/kg	39.1	4.05	1	A
PCBs, Total	ND		ug/kg	39.1	3.47	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	52		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-04
 Client ID: RB15_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 07:05
 Analyst: AWS
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.8	3.18	1	A
Aroclor 1221	ND		ug/kg	35.8	3.59	1	A
Aroclor 1232	ND		ug/kg	35.8	7.59	1	A
Aroclor 1242	ND		ug/kg	35.8	4.82	1	A
Aroclor 1248	ND		ug/kg	35.8	5.37	1	A
Aroclor 1254	ND		ug/kg	35.8	3.92	1	A
Aroclor 1260	ND		ug/kg	35.8	6.62	1	A
Aroclor 1262	ND		ug/kg	35.8	4.55	1	A
Aroclor 1268	ND		ug/kg	35.8	3.71	1	A
PCBs, Total	ND		ug/kg	35.8	3.18	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	55		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05
 Client ID: RB15_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:05
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 07:19
 Analyst: AWS
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	33.3	2.96	1	A
Aroclor 1221	ND		ug/kg	33.3	3.34	1	A
Aroclor 1232	ND		ug/kg	33.3	7.07	1	A
Aroclor 1242	ND		ug/kg	33.3	4.50	1	A
Aroclor 1248	ND		ug/kg	33.3	5.00	1	A
Aroclor 1254	ND		ug/kg	33.3	3.65	1	A
Aroclor 1260	ND		ug/kg	33.3	6.16	1	A
Aroclor 1262	ND		ug/kg	33.3	4.24	1	A
Aroclor 1268	ND		ug/kg	33.3	3.46	1	A
PCBs, Total	ND		ug/kg	33.3	2.96	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	49		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-06
 Client ID: RB15_23-25
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:15
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 13:53
 Analyst: HT
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.1	3.38	1	A
Aroclor 1221	ND		ug/kg	38.1	3.81	1	A
Aroclor 1232	ND		ug/kg	38.1	8.07	1	A
Aroclor 1242	ND		ug/kg	38.1	5.13	1	A
Aroclor 1248	ND		ug/kg	38.1	5.71	1	A
Aroclor 1254	ND		ug/kg	38.1	4.16	1	A
Aroclor 1260	ND		ug/kg	38.1	7.04	1	A
Aroclor 1262	ND		ug/kg	38.1	4.84	1	A
Aroclor 1268	ND		ug/kg	38.1	3.94	1	A
PCBs, Total	ND		ug/kg	38.1	3.38	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	37		30-150	A
Decachlorobiphenyl	31		30-150	A
2,4,5,6-Tetrachloro-m-xylene	34		30-150	B
Decachlorobiphenyl	34		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
 Client ID: RB15_28-30
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 05:12
 Analyst: AWS
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.5	3.51	1	A
Aroclor 1221	ND		ug/kg	39.5	3.96	1	A
Aroclor 1232	ND		ug/kg	39.5	8.37	1	A
Aroclor 1242	ND		ug/kg	39.5	5.32	1	A
Aroclor 1248	ND		ug/kg	39.5	5.92	1	A
Aroclor 1254	ND		ug/kg	39.5	4.32	1	A
Aroclor 1260	ND		ug/kg	39.5	7.30	1	A
Aroclor 1262	ND		ug/kg	39.5	5.02	1	A
Aroclor 1268	ND		ug/kg	39.5	4.09	1	A
PCBs, Total	ND		ug/kg	39.5	3.51	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
 Client ID: RB16_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 18:23
 Analyst: HT
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/11/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.2	3.13	1	A
Aroclor 1221	ND		ug/kg	35.2	3.53	1	A
Aroclor 1232	ND		ug/kg	35.2	7.47	1	A
Aroclor 1242	ND		ug/kg	35.2	4.75	1	A
Aroclor 1248	ND		ug/kg	35.2	5.28	1	A
Aroclor 1254	ND		ug/kg	35.2	3.85	1	A
Aroclor 1260	ND		ug/kg	35.2	6.51	1	A
Aroclor 1262	ND		ug/kg	35.2	4.47	1	A
Aroclor 1268	ND		ug/kg	35.2	3.65	1	A
PCBs, Total	ND		ug/kg	35.2	3.13	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	42		30-150	A
Decachlorobiphenyl	37		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	51		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09
 Client ID: RB16_13-15
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 18:36
 Analyst: HT
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/11/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.3	3.22	1	A
Aroclor 1221	ND		ug/kg	36.3	3.64	1	A
Aroclor 1232	ND		ug/kg	36.3	7.69	1	A
Aroclor 1242	ND		ug/kg	36.3	4.89	1	A
Aroclor 1248	ND		ug/kg	36.3	5.44	1	A
Aroclor 1254	ND		ug/kg	36.3	3.97	1	A
Aroclor 1260	ND		ug/kg	36.3	6.70	1	A
Aroclor 1262	ND		ug/kg	36.3	4.61	1	A
Aroclor 1268	ND		ug/kg	36.3	3.76	1	A
PCBs, Total	ND		ug/kg	36.3	3.22	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
 Client ID: RB16_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/11/19 18:49
 Analyst: HT
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/11/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.1	3.39	1	A
Aroclor 1221	ND		ug/kg	38.1	3.82	1	A
Aroclor 1232	ND		ug/kg	38.1	8.08	1	A
Aroclor 1242	ND		ug/kg	38.1	5.14	1	A
Aroclor 1248	ND		ug/kg	38.1	5.72	1	A
Aroclor 1254	ND		ug/kg	38.1	4.17	1	A
Aroclor 1260	ND		ug/kg	38.1	7.05	1	A
Aroclor 1262	ND		ug/kg	38.1	4.84	1	A
Aroclor 1268	ND		ug/kg	38.1	3.95	1	A
PCBs, Total	ND		ug/kg	38.1	3.39	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		30-150	A
Decachlorobiphenyl	41		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	52		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
 Client ID: SODUP05_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 01/14/19 06:40
 Analyst: WR
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/11/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.0	3.46	1	A
Aroclor 1221	ND		ug/kg	39.0	3.91	1	A
Aroclor 1232	ND		ug/kg	39.0	8.27	1	A
Aroclor 1242	ND		ug/kg	39.0	5.26	1	A
Aroclor 1248	ND		ug/kg	39.0	5.85	1	A
Aroclor 1254	ND		ug/kg	39.0	4.27	1	A
Aroclor 1260	ND		ug/kg	39.0	7.21	1	A
Aroclor 1262	ND		ug/kg	39.0	4.96	1	A
Aroclor 1268	ND		ug/kg	39.0	4.04	1	A
PCBs, Total	ND		ug/kg	39.0	3.46	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8082A
 Analytical Date: 01/10/19 07:29
 Analyst: AWS

Extraction Method: EPA 3510C
 Extraction Date: 01/09/19 07:35
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/09/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8082A
Analytical Date: 01/09/19 11:01
Analyst: HT

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 08:22
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/19
Cleanup Method: EPA 3660B
Cleanup Date: 01/09/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 12 Batch: WG1195614-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8082A
 Analytical Date: 01/11/19 03:48
 Analyst: AWS

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 07:36
 Cleanup Method: EPA 3665A
 Cleanup Date: 01/10/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-11 Batch: WG1195950-1						
Aroclor 1016	ND		ug/kg	31.9	2.83	A
Aroclor 1221	ND		ug/kg	31.9	3.19	A
Aroclor 1232	ND		ug/kg	31.9	6.76	A
Aroclor 1242	ND		ug/kg	31.9	4.30	A
Aroclor 1248	ND		ug/kg	31.9	4.78	A
Aroclor 1254	ND		ug/kg	31.9	3.49	A
Aroclor 1260	ND		ug/kg	31.9	5.89	A
Aroclor 1262	ND		ug/kg	31.9	4.05	A
Aroclor 1268	ND		ug/kg	31.9	3.30	A
PCBs, Total	ND		ug/kg	31.9	2.83	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	73		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	74		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 12 Batch: WG1195614-2 WG1195614-3									
Aroclor 1016	73		77		40-140	6		50	A
Aroclor 1260	75		79		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		84		30-150	A
Decachlorobiphenyl	73		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		86		30-150	B
Decachlorobiphenyl	80		89		30-150	B



Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1195950-2 WG1195950-3									
Aroclor 1016	77		71		40-140	8		50	A
Aroclor 1260	72		70		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		64		30-150	A
Decachlorobiphenyl	75		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		65		30-150	B
Decachlorobiphenyl	78		78		30-150	B

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11 QC Batch ID: WG1195950-4 WG1195950-5 QC Sample: L1900879-03 Client ID: RB10_33-35													
Aroclor 1016	ND	238	176	74		189	80		40-140	7		50	A
Aroclor 1260	ND	238	164	69		174	73		40-140	6		50	A

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	65		70		30-150	A
Decachlorobiphenyl	72		76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		73		30-150	B
Decachlorobiphenyl	76		80		30-150	B



Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-11 QC Batch ID: WG1195950-6 WG1195950-7 QC Sample: L1900879-07 Client ID: RB15_28-30													
Aroclor 1016	ND	245	173	71		177	73		40-140	2		50	A
Aroclor 1260	ND	245	147	60		165	68		40-140	12		50	A

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
2,4,5,6-Tetrachloro-m-xylene	66		67		30-150	A
Decachlorobiphenyl	66		69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		67		30-150	B
Decachlorobiphenyl	62		73		30-150	B

PESTICIDES

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01
 Client ID: RB10_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/11/19 18:29
 Analyst: SL
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:16
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.72	0.337	1	A
Lindane	ND		ug/kg	0.718	0.321	1	A
Alpha-BHC	ND		ug/kg	0.718	0.204	1	A
Beta-BHC	ND		ug/kg	1.72	0.653	1	A
Heptachlor	ND		ug/kg	0.862	0.386	1	A
Aldrin	ND		ug/kg	1.72	0.607	1	A
Heptachlor epoxide	ND		ug/kg	3.23	0.969	1	A
Endrin	5.73	P	ug/kg	0.718	0.294	1	A
Endrin aldehyde	ND		ug/kg	2.15	0.754	1	A
Endrin ketone	ND		ug/kg	1.72	0.444	1	A
Dieldrin	ND		ug/kg	1.08	0.538	1	A
4,4'-DDE	ND		ug/kg	1.72	0.398	1	A
4,4'-DDD	ND		ug/kg	1.72	0.614	1	A
4,4'-DDT	ND		ug/kg	3.23	1.38	1	A
Endosulfan I	ND		ug/kg	1.72	0.407	1	A
Endosulfan II	1.61	JIP	ug/kg	1.72	0.576	1	A
Endosulfan sulfate	ND		ug/kg	0.718	0.342	1	A
Methoxychlor	ND		ug/kg	3.23	1.00	1	A
Toxaphene	ND		ug/kg	32.3	9.05	1	A
cis-Chlordane	ND		ug/kg	2.15	0.600	1	A
trans-Chlordane	ND		ug/kg	2.15	0.569	1	A
Chlordane	ND		ug/kg	14.0	5.71	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-01

Date Collected: 01/08/19 11:30

Client ID: RB10_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	67		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01
 Client ID: RB10_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/14/19 15:10
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	182	11.5	1	A
2,4,5-T	ND		ug/kg	182	5.64	1	A
2,4,5-TP (Silvex)	ND		ug/kg	182	4.84	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	88		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
 Client ID: RB10_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/15/19 12:53
 Analyst: BM
 Percent Solids: 72%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:16
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.15	0.421	1	A
Lindane	ND		ug/kg	0.895	0.400	1	A
Alpha-BHC	ND		ug/kg	0.895	0.254	1	A
Beta-BHC	ND		ug/kg	2.15	0.814	1	A
Heptachlor	ND		ug/kg	1.07	0.482	1	A
Aldrin	ND		ug/kg	2.15	0.756	1	A
Heptachlor epoxide	ND		ug/kg	4.03	1.21	1	A
Endrin	ND		ug/kg	0.895	0.367	1	A
Endrin aldehyde	ND		ug/kg	2.68	0.940	1	A
Endrin ketone	ND		ug/kg	2.15	0.553	1	A
Dieldrin	ND		ug/kg	1.34	0.671	1	A
4,4'-DDE	ND		ug/kg	2.15	0.497	1	A
4,4'-DDD	ND		ug/kg	2.15	0.766	1	A
4,4'-DDT	ND		ug/kg	4.03	1.73	1	A
Endosulfan I	ND		ug/kg	2.15	0.508	1	A
Endosulfan II	ND		ug/kg	2.15	0.718	1	A
Endosulfan sulfate	ND		ug/kg	0.895	0.426	1	A
Methoxychlor	ND		ug/kg	4.03	1.25	1	A
Toxaphene	ND		ug/kg	40.3	11.3	1	A
cis-Chlordane	ND		ug/kg	2.68	0.748	1	A
trans-Chlordane	ND		ug/kg	2.68	0.709	1	A
Chlordane	ND		ug/kg	17.4	7.12	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-02

Date Collected: 01/08/19 11:35

Client ID: RB10_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	84		30-150	B
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	93		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
 Client ID: RB10_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/14/19 15:29
 Analyst: DGM
 Percent Solids: 72%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	229	14.4	1	A
2,4,5-T	ND		ug/kg	229	7.10	1	A
2,4,5-TP (Silvex)	ND		ug/kg	229	6.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	115		30-150	A
DCAA	171	Q	30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
 Client ID: RB10_33-35
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/11/19 15:58
 Analyst: KEG
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:16
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.87	0.367	1	A
Lindane	ND		ug/kg	0.780	0.349	1	A
Alpha-BHC	ND		ug/kg	0.780	0.222	1	A
Beta-BHC	ND		ug/kg	1.87	0.710	1	A
Heptachlor	ND		ug/kg	0.937	0.420	1	A
Aldrin	ND		ug/kg	1.87	0.660	1	A
Heptachlor epoxide	ND		ug/kg	3.51	1.05	1	A
Endrin	ND		ug/kg	0.780	0.320	1	A
Endrin aldehyde	ND		ug/kg	2.34	0.820	1	A
Endrin ketone	ND		ug/kg	1.87	0.482	1	A
Dieldrin	ND		ug/kg	1.17	0.585	1	A
4,4'-DDE	ND		ug/kg	1.87	0.433	1	A
4,4'-DDD	ND		ug/kg	1.87	0.668	1	A
4,4'-DDT	ND		ug/kg	3.51	1.51	1	A
Endosulfan I	ND		ug/kg	1.87	0.442	1	A
Endosulfan II	ND		ug/kg	1.87	0.626	1	A
Endosulfan sulfate	ND		ug/kg	0.780	0.372	1	A
Methoxychlor	ND		ug/kg	3.51	1.09	1	A
Toxaphene	ND		ug/kg	35.1	9.84	1	A
cis-Chlordane	ND		ug/kg	2.34	0.652	1	A
trans-Chlordane	ND		ug/kg	2.34	0.618	1	A
Chlordane	ND		ug/kg	15.2	6.20	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-03

Date Collected: 01/08/19 11:40

Client ID: RB10_33-35

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	112		30-150	B
Decachlorobiphenyl	97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	108		30-150	A
Decachlorobiphenyl	78		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
 Client ID: RB10_33-35
 Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/14/19 13:17
 Analyst: DGM
 Percent Solids: 83%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	196	12.4	1	A
2,4,5-T	ND		ug/kg	196	6.08	1	A
2,4,5-TP (Silvex)	ND		ug/kg	196	5.22	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	76		30-150	A
DCAA	70		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-04
 Client ID: RB15_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/11/19 18:55
 Analyst: SL
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:16
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.351	1	A
Lindane	ND		ug/kg	0.747	0.334	1	A
Alpha-BHC	ND		ug/kg	0.747	0.212	1	A
Beta-BHC	ND		ug/kg	1.79	0.680	1	A
Heptachlor	ND		ug/kg	0.896	0.402	1	A
Aldrin	ND		ug/kg	1.79	0.631	1	A
Heptachlor epoxide	ND		ug/kg	3.36	1.01	1	A
Endrin	ND		ug/kg	0.747	0.306	1	A
Endrin aldehyde	1.20	J	ug/kg	2.24	0.784	1	A
Endrin ketone	ND		ug/kg	1.79	0.462	1	A
Dieldrin	ND		ug/kg	1.12	0.560	1	A
4,4'-DDE	ND		ug/kg	1.79	0.414	1	A
4,4'-DDD	ND		ug/kg	1.79	0.639	1	A
4,4'-DDT	ND		ug/kg	3.36	1.44	1	A
Endosulfan I	ND		ug/kg	1.79	0.424	1	A
Endosulfan II	0.787	JP	ug/kg	1.79	0.599	1	B
Endosulfan sulfate	ND		ug/kg	0.747	0.356	1	A
Methoxychlor	ND		ug/kg	3.36	1.04	1	A
Toxaphene	ND		ug/kg	33.6	9.41	1	A
cis-Chlordane	ND		ug/kg	2.24	0.624	1	A
trans-Chlordane	ND	IP	ug/kg	2.24	0.592	1	A
Chlordane	ND		ug/kg	14.6	5.94	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-04

Date Collected: 01/08/19 13:00

Client ID: RB15_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	80		30-150	B
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	63		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-04
 Client ID: RB15_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/14/19 15:48
 Analyst: DGM
 Percent Solids: 88%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	189	11.9	1	A
2,4,5-T	ND		ug/kg	189	5.86	1	A
2,4,5-TP (Silvex)	ND		ug/kg	189	5.03	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	37		30-150	A
DCAA	59		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05
 Client ID: RB15_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:05
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/11/19 19:08
 Analyst: SL
 Percent Solids: 96%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:16
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.61	0.316	1	A
Lindane	ND		ug/kg	0.671	0.300	1	A
Alpha-BHC	ND		ug/kg	0.671	0.191	1	A
Beta-BHC	ND		ug/kg	1.61	0.611	1	A
Heptachlor	ND		ug/kg	0.806	0.361	1	A
Aldrin	ND		ug/kg	1.61	0.567	1	A
Heptachlor epoxide	ND		ug/kg	3.02	0.906	1	A
Endrin	ND		ug/kg	0.671	0.275	1	A
Endrin aldehyde	ND		ug/kg	2.01	0.705	1	A
Endrin ketone	ND		ug/kg	1.61	0.415	1	A
Dieldrin	ND		ug/kg	1.01	0.503	1	A
4,4'-DDE	ND		ug/kg	1.61	0.372	1	A
4,4'-DDD	ND		ug/kg	1.61	0.575	1	A
4,4'-DDT	ND		ug/kg	3.02	1.30	1	A
Endosulfan I	ND		ug/kg	1.61	0.381	1	A
Endosulfan II	ND		ug/kg	1.61	0.538	1	A
Endosulfan sulfate	ND		ug/kg	0.671	0.320	1	A
Methoxychlor	ND		ug/kg	3.02	0.940	1	A
Toxaphene	ND		ug/kg	30.2	8.46	1	A
cis-Chlordane	ND		ug/kg	2.01	0.561	1	A
trans-Chlordane	ND		ug/kg	2.01	0.532	1	A
Chlordane	ND		ug/kg	13.1	5.34	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-05

Date Collected: 01/08/19 13:05

Client ID: RB15_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	78		30-150	B
2,4,5,6-Tetrachloro-m-xylene	314	Q	30-150	A
Decachlorobiphenyl	85		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05
 Client ID: RB15_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:05
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/15/19 14:56
 Analyst: DGM
 Percent Solids: 96%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	173	10.9	1	A
2,4,5-T	ND		ug/kg	173	5.35	1	A
2,4,5-TP (Silvex)	ND		ug/kg	173	4.59	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	121		30-150	A
DCAA	100		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-06
 Client ID: RB15_23-25
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:15
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/11/19 19:20
 Analyst: SL
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:16
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.82	0.357	1	A
Lindane	ND		ug/kg	0.760	0.340	1	A
Alpha-BHC	ND		ug/kg	0.760	0.216	1	A
Beta-BHC	ND		ug/kg	1.82	0.692	1	A
Heptachlor	ND		ug/kg	0.912	0.409	1	A
Aldrin	ND		ug/kg	1.82	0.643	1	A
Heptachlor epoxide	ND		ug/kg	3.42	1.03	1	A
Endrin	ND		ug/kg	0.760	0.312	1	A
Endrin aldehyde	ND		ug/kg	2.28	0.798	1	A
Endrin ketone	ND		ug/kg	1.82	0.470	1	A
Dieldrin	ND		ug/kg	1.14	0.570	1	A
4,4'-DDE	ND		ug/kg	1.82	0.422	1	A
4,4'-DDD	ND		ug/kg	1.82	0.651	1	A
4,4'-DDT	ND		ug/kg	3.42	1.47	1	A
Endosulfan I	ND		ug/kg	1.82	0.431	1	A
Endosulfan II	ND		ug/kg	1.82	0.610	1	A
Endosulfan sulfate	ND		ug/kg	0.760	0.362	1	A
Methoxychlor	ND		ug/kg	3.42	1.06	1	A
Toxaphene	ND		ug/kg	34.2	9.58	1	A
cis-Chlordane	ND		ug/kg	2.28	0.636	1	A
trans-Chlordane	ND	IP	ug/kg	2.28	0.602	1	A
Chlordane	ND		ug/kg	14.8	6.04	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-06

Date Collected: 01/08/19 13:15

Client ID: RB15_23-25

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	181	Q	30-150	A
Decachlorobiphenyl	100		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-06
 Client ID: RB15_23-25
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:15
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/15/19 11:09
 Analyst: DGM
 Percent Solids: 83%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	200	12.6	1	A
2,4,5-T	ND		ug/kg	200	6.21	1	A
2,4,5-TP (Silvex)	ND		ug/kg	200	5.32	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	121		30-150	A
DCAA	98		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
 Client ID: RB15_28-30
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/11/19 16:36
 Analyst: KEG
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:17
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.91	0.374	1	A
Lindane	ND		ug/kg	0.796	0.356	1	A
Alpha-BHC	ND		ug/kg	0.796	0.226	1	A
Beta-BHC	ND		ug/kg	1.91	0.725	1	A
Heptachlor	ND		ug/kg	0.956	0.428	1	A
Aldrin	ND		ug/kg	1.91	0.673	1	A
Heptachlor epoxide	ND		ug/kg	3.58	1.08	1	A
Endrin	ND		ug/kg	0.796	0.326	1	A
Endrin aldehyde	ND		ug/kg	2.39	0.836	1	A
Endrin ketone	ND		ug/kg	1.91	0.492	1	A
Dieldrin	ND		ug/kg	1.19	0.597	1	A
4,4'-DDE	ND		ug/kg	1.91	0.442	1	A
4,4'-DDD	ND		ug/kg	1.91	0.682	1	A
4,4'-DDT	ND		ug/kg	3.58	1.54	1	A
Endosulfan I	ND		ug/kg	1.91	0.452	1	A
Endosulfan II	ND		ug/kg	1.91	0.639	1	A
Endosulfan sulfate	ND		ug/kg	0.796	0.379	1	A
Methoxychlor	ND		ug/kg	3.58	1.11	1	A
Toxaphene	ND		ug/kg	35.8	10.0	1	A
cis-Chlordane	ND		ug/kg	2.39	0.666	1	A
trans-Chlordane	ND		ug/kg	2.39	0.631	1	A
Chlordane	ND		ug/kg	15.5	6.33	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-07

Date Collected: 01/08/19 13:10

Client ID: RB15_28-30

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	145		30-150	A
Decachlorobiphenyl	106		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
 Client ID: RB15_28-30
 Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/14/19 14:13
 Analyst: DGM
 Percent Solids: 81%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	202	12.7	1	A
2,4,5-T	ND		ug/kg	202	6.26	1	A
2,4,5-TP (Silvex)	ND		ug/kg	202	5.37	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	117		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
 Client ID: RB16_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/11/19 19:33
 Analyst: SL
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:17
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.67	0.327	1	A
Lindane	ND		ug/kg	0.696	0.311	1	A
Alpha-BHC	ND		ug/kg	0.696	0.198	1	A
Beta-BHC	ND		ug/kg	1.67	0.634	1	A
Heptachlor	ND		ug/kg	0.836	0.375	1	A
Aldrin	ND		ug/kg	1.67	0.589	1	A
Heptachlor epoxide	ND		ug/kg	3.13	0.940	1	A
Endrin	ND		ug/kg	0.696	0.286	1	A
Endrin aldehyde	ND		ug/kg	2.09	0.731	1	A
Endrin ketone	ND		ug/kg	1.67	0.430	1	A
Dieldrin	ND		ug/kg	1.04	0.522	1	A
4,4'-DDE	ND		ug/kg	1.67	0.387	1	A
4,4'-DDD	ND		ug/kg	1.67	0.596	1	A
4,4'-DDT	ND		ug/kg	3.13	1.34	1	A
Endosulfan I	ND		ug/kg	1.67	0.395	1	A
Endosulfan II	1.17	JIP	ug/kg	1.67	0.559	1	A
Endosulfan sulfate	ND		ug/kg	0.696	0.332	1	A
Methoxychlor	ND		ug/kg	3.13	0.975	1	A
Toxaphene	ND		ug/kg	31.3	8.78	1	A
cis-Chlordane	ND		ug/kg	2.09	0.582	1	A
trans-Chlordane	ND		ug/kg	2.09	0.552	1	A
Chlordane	ND		ug/kg	13.6	5.54	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-08

Date Collected: 01/08/19 10:40

Client ID: RB16_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	56		30-150	B
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	57		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
 Client ID: RB16_0-2
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/15/19 11:28
 Analyst: DGM
 Percent Solids: 93%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	175	11.0	1	A
2,4,5-T	ND		ug/kg	175	5.42	1	A
2,4,5-TP (Silvex)	ND		ug/kg	175	4.65	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	79		30-150	A
DCAA	102		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09
 Client ID: RB16_13-15
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/11/19 19:46
 Analyst: SL
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:17
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.332	1	A
Lindane	ND		ug/kg	0.706	0.316	1	A
Alpha-BHC	ND		ug/kg	0.706	0.201	1	A
Beta-BHC	ND		ug/kg	1.70	0.643	1	A
Heptachlor	ND		ug/kg	0.848	0.380	1	A
Aldrin	ND		ug/kg	1.70	0.597	1	A
Heptachlor epoxide	ND		ug/kg	3.18	0.954	1	A
Endrin	25.2	P	ug/kg	0.706	0.290	1	A
Endrin aldehyde	ND		ug/kg	2.12	0.742	1	A
Endrin ketone	ND		ug/kg	1.70	0.437	1	A
Dieldrin	ND		ug/kg	1.06	0.530	1	A
4,4'-DDE	ND		ug/kg	1.70	0.392	1	A
4,4'-DDD	6.69		ug/kg	1.70	0.605	1	A
4,4'-DDT	5.53	IP	ug/kg	3.18	1.36	1	B
Endosulfan I	ND		ug/kg	1.70	0.401	1	A
Endosulfan II	ND		ug/kg	1.70	0.567	1	A
Endosulfan sulfate	ND		ug/kg	0.706	0.336	1	A
Methoxychlor	ND		ug/kg	3.18	0.989	1	A
Toxaphene	ND		ug/kg	31.8	8.90	1	A
cis-Chlordane	ND		ug/kg	2.12	0.591	1	A
trans-Chlordane	ND		ug/kg	2.12	0.560	1	A
Chlordane	ND		ug/kg	13.8	5.62	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-09

Date Collected: 01/08/19 10:45

Client ID: RB16_13-15

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	100		30-150	B
2,4,5,6-Tetrachloro-m-xylene	106		30-150	A
Decachlorobiphenyl	102		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09
 Client ID: RB16_13-15
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/15/19 11:47
 Analyst: DGM
 Percent Solids: 91%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	181	11.4	1	A
2,4,5-T	ND		ug/kg	181	5.62	1	A
2,4,5-TP (Silvex)	ND		ug/kg	181	4.83	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	111		30-150	A
DCAA	79		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
 Client ID: RB16_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 01/11/19 19:59
 Analyst: SL
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:17
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.360	1	A
Lindane	ND		ug/kg	0.767	0.343	1	A
Alpha-BHC	ND		ug/kg	0.767	0.218	1	A
Beta-BHC	ND		ug/kg	1.84	0.698	1	A
Heptachlor	ND		ug/kg	0.920	0.412	1	A
Aldrin	ND		ug/kg	1.84	0.648	1	A
Heptachlor epoxide	ND		ug/kg	3.45	1.04	1	A
Endrin	ND		ug/kg	0.767	0.314	1	A
Endrin aldehyde	ND		ug/kg	2.30	0.805	1	A
Endrin ketone	ND		ug/kg	1.84	0.474	1	A
Dieldrin	ND		ug/kg	1.15	0.575	1	A
4,4'-DDE	ND		ug/kg	1.84	0.426	1	A
4,4'-DDD	ND		ug/kg	1.84	0.656	1	A
4,4'-DDT	ND		ug/kg	3.45	1.48	1	A
Endosulfan I	ND		ug/kg	1.84	0.435	1	A
Endosulfan II	ND		ug/kg	1.84	0.615	1	A
Endosulfan sulfate	ND		ug/kg	0.767	0.365	1	A
Methoxychlor	ND		ug/kg	3.45	1.07	1	A
Toxaphene	ND		ug/kg	34.5	9.66	1	A
cis-Chlordane	ND		ug/kg	2.30	0.641	1	A
trans-Chlordane	ND		ug/kg	2.30	0.607	1	A
Chlordane	ND		ug/kg	15.0	6.10	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-10

Date Collected: 01/08/19 10:50

Client ID: RB16_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	110		30-150	B
Decachlorobiphenyl	93		30-150	B
2,4,5,6-Tetrachloro-m-xylene	106		30-150	A
Decachlorobiphenyl	83		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10
 Client ID: RB16_18-20
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:50
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/15/19 12:05
 Analyst: DGM
 Percent Solids: 83%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	198	12.5	1	A
2,4,5-T	ND		ug/kg	198	6.15	1	A
2,4,5-TP (Silvex)	ND		ug/kg	198	5.28	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	114		30-150	A
DCAA	99		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
Client ID: SODUP05_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 01/11/19 20:11
Analyst: SL
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 01/09/19 09:17
Cleanup Method: EPA 3620B
Cleanup Date: 01/10/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.84	0.360	1	A
Lindane	ND		ug/kg	0.766	0.342	1	A
Alpha-BHC	ND		ug/kg	0.766	0.218	1	A
Beta-BHC	ND		ug/kg	1.84	0.697	1	A
Heptachlor	ND		ug/kg	0.919	0.412	1	A
Aldrin	ND		ug/kg	1.84	0.647	1	A
Heptachlor epoxide	ND		ug/kg	3.45	1.03	1	A
Endrin	ND		ug/kg	0.766	0.314	1	A
Endrin aldehyde	ND		ug/kg	2.30	0.804	1	A
Endrin ketone	ND		ug/kg	1.84	0.473	1	A
Dieldrin	ND	IP	ug/kg	1.15	0.574	1	B
4,4'-DDE	ND		ug/kg	1.84	0.425	1	A
4,4'-DDD	ND		ug/kg	1.84	0.656	1	A
4,4'-DDT	ND		ug/kg	3.45	1.48	1	A
Endosulfan I	ND		ug/kg	1.84	0.434	1	A
Endosulfan II	ND		ug/kg	1.84	0.614	1	A
Endosulfan sulfate	ND		ug/kg	0.766	0.364	1	A
Methoxychlor	ND		ug/kg	3.45	1.07	1	A
Toxaphene	ND		ug/kg	34.5	9.65	1	A
cis-Chlordane	ND		ug/kg	2.30	0.640	1	A
trans-Chlordane	11.2	IP	ug/kg	2.30	0.607	1	A
Chlordane	ND		ug/kg	14.9	6.09	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-11
 Client ID: SODUP05_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	53		30-150	B
2,4,5,6-Tetrachloro-m-xylene	120		30-150	A
Decachlorobiphenyl	85		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
 Client ID: SODUP05_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 01/15/19 12:24
 Analyst: DGM
 Percent Solids: 83%
 Methylation Date: 01/12/19 20:02

Extraction Method: EPA 8151A
 Extraction Date: 01/11/19 12:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	197	12.4	1	A
2,4,5-T	ND		ug/kg	197	6.11	1	A
2,4,5-TP (Silvex)	ND		ug/kg	197	5.25	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	114		30-150	A
DCAA	85		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8081B
 Analytical Date: 01/10/19 17:44
 Analyst: KEG

Extraction Method: EPA 3510C
 Extraction Date: 01/09/19 07:29

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-12

Date Collected: 01/08/19 10:00

Client ID: SOFB04_010819

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	73		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8151A
 Analytical Date: 01/10/19 20:36
 Analyst: AMC

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 18:22

Methylation Date: 01/10/19 03:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	102		30-150	A
DCAA	87		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/10/19 12:25
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 01/08/19 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 12 Batch: WG1195638-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 01/10/19 12:25
 Analyst: BM

Extraction Method: EPA 3510C
 Extraction Date: 01/08/19 09:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 12 Batch: WG1195638-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/11/19 15:33
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 01/09/19 09:16
Cleanup Method: EPA 3620B
Cleanup Date: 01/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,03-11 Batch: WG1195981-1						
Delta-BHC	ND		ug/kg	1.58	0.309	A
Lindane	ND		ug/kg	0.658	0.294	A
Alpha-BHC	ND		ug/kg	0.658	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.599	A
Heptachlor	ND		ug/kg	0.789	0.354	A
Aldrin	ND		ug/kg	1.58	0.556	A
Heptachlor epoxide	ND		ug/kg	2.96	0.888	A
Endrin	ND		ug/kg	0.658	0.270	A
Endrin aldehyde	ND		ug/kg	1.97	0.691	A
Endrin ketone	ND		ug/kg	1.58	0.406	A
Dieldrin	ND		ug/kg	0.987	0.493	A
4,4'-DDE	ND		ug/kg	1.58	0.365	A
4,4'-DDD	ND		ug/kg	1.58	0.563	A
4,4'-DDT	ND		ug/kg	2.96	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.373	A
Endosulfan II	ND		ug/kg	1.58	0.528	A
Endosulfan sulfate	ND		ug/kg	0.658	0.313	A
Methoxychlor	ND		ug/kg	2.96	0.921	A
Toxaphene	ND		ug/kg	29.6	8.29	A
cis-Chlordane	ND		ug/kg	1.97	0.550	A
trans-Chlordane	ND		ug/kg	1.97	0.521	A
Chlordane	ND		ug/kg	12.8	5.23	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8081B
 Analytical Date: 01/11/19 15:33
 Analyst: KEG

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:16
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,03-11 Batch: WG1195981-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	118		30-150	B
Decachlorobiphenyl	102		30-150	B
2,4,5,6-Tetrachloro-m-xylene	114		30-150	A
Decachlorobiphenyl	98		30-150	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 01/10/19 11:42
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 01/09/19 18:22

Methylation Date: 01/10/19 03:11

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 12 Batch: WG1196169-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	89		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

**Method Blank Analysis
 Batch Quality Control**

Analytical Method: 1,8151A
 Analytical Date: 01/11/19 10:43
 Analyst: KEG

Extraction Method: EPA 8151A
 Extraction Date: 01/10/19 15:24

Methylation Date: 01/11/19 04:45

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-11 Batch: WG1196650-1						
2,4-D	ND		ug/kg	161	10.2	A
2,4,5-T	ND		ug/kg	161	5.00	A
2,4,5-TP (Silvex)	ND		ug/kg	161	4.29	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	76		30-150	A
DCAA	68		30-150	B

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 01/15/19 12:28
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 01/09/19 09:16
Cleanup Method: EPA 3620B
Cleanup Date: 01/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1197817-1						
Delta-BHC	ND		ug/kg	1.58	0.309	A
Lindane	ND		ug/kg	0.658	0.294	A
Alpha-BHC	ND		ug/kg	0.658	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.599	A
Heptachlor	ND		ug/kg	0.789	0.354	A
Aldrin	ND		ug/kg	1.58	0.556	A
Heptachlor epoxide	ND		ug/kg	2.96	0.888	A
Endrin	ND		ug/kg	0.658	0.270	A
Endrin aldehyde	ND		ug/kg	1.97	0.691	A
Endrin ketone	ND		ug/kg	1.58	0.406	A
Dieldrin	ND		ug/kg	0.987	0.493	A
4,4'-DDE	ND		ug/kg	1.58	0.365	A
4,4'-DDD	ND		ug/kg	1.58	0.563	A
4,4'-DDT	ND		ug/kg	2.96	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.373	A
Endosulfan II	ND		ug/kg	1.58	0.528	A
Endosulfan sulfate	ND		ug/kg	0.658	0.313	A
Methoxychlor	ND		ug/kg	2.96	0.921	A
Toxaphene	ND		ug/kg	29.6	8.29	A
cis-Chlordane	ND		ug/kg	1.97	0.550	A
trans-Chlordane	ND		ug/kg	1.97	0.521	A
Chlordane	ND		ug/kg	12.8	5.23	A

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 01/15/19 12:28
 Analyst: BM

Extraction Method: EPA 3546
 Extraction Date: 01/09/19 09:16
 Cleanup Method: EPA 3620B
 Cleanup Date: 01/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02 Batch: WG1197817-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	117		30-150	B
Decachlorobiphenyl	100		30-150	B
2,4,5,6-Tetrachloro-m-xylene	114		30-150	A
Decachlorobiphenyl	98		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 12 Batch: WG1195638-2 WG1195638-3									
Delta-BHC	72		83		30-150	14		20	A
Lindane	72		78		30-150	7		20	A
Alpha-BHC	75		82		30-150	9		20	A
Beta-BHC	76		88		30-150	14		20	A
Heptachlor	72		78		30-150	8		20	A
Aldrin	71		76		30-150	8		20	A
Heptachlor epoxide	77		84		30-150	9		20	A
Endrin	75		83		30-150	11		20	A
Endrin aldehyde	59		62		30-150	5		20	A
Endrin ketone	69		82		30-150	17		20	A
Dieldrin	77		85		30-150	9		20	A
4,4'-DDE	74		82		30-150	10		20	A
4,4'-DDD	76		79		30-150	4		20	A
4,4'-DDT	71		75		30-150	6		20	A
Endosulfan I	71		78		30-150	10		20	A
Endosulfan II	71		76		30-150	7		20	A
Endosulfan sulfate	65		78		30-150	19		20	A
Methoxychlor	71		83		30-150	16		20	A
cis-Chlordane	64		69		30-150	7		20	A
trans-Chlordane	69		75		30-150	9		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 12 Batch: WG1195638-2 WG1195638-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	72		81		30-150	A
Decachlorobiphenyl	36		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		81		30-150	B
Decachlorobiphenyl	36		44		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-11 Batch: WG1195981-2 WG1195981-3									
Delta-BHC	86		90		30-150	5		30	A
Lindane	80		87		30-150	8		30	A
Alpha-BHC	87		91		30-150	4		30	A
Beta-BHC	90		93		30-150	3		30	A
Heptachlor	100		104		30-150	4		30	A
Aldrin	82		86		30-150	5		30	A
Heptachlor epoxide	72		93		30-150	25		30	A
Endrin	87		98		30-150	12		30	A
Endrin aldehyde	61		64		30-150	5		30	A
Endrin ketone	76		80		30-150	5		30	A
Dieldrin	88		99		30-150	12		30	A
4,4'-DDE	80		78		30-150	3		30	A
4,4'-DDD	85		91		30-150	7		30	A
4,4'-DDT	82		88		30-150	7		30	A
Endosulfan I	80		84		30-150	5		30	A
Endosulfan II	86		91		30-150	6		30	A
Endosulfan sulfate	68		72		30-150	6		30	A
Methoxychlor	84		90		30-150	7		30	A
cis-Chlordane	70		76		30-150	8		30	A
trans-Chlordane	72		82		30-150	13		30	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-11 Batch: WG1195981-2 WG1195981-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	99		98		30-150	B
Decachlorobiphenyl	84		86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	93		94		30-150	A
Decachlorobiphenyl	81		75		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 12 Batch: WG1196169-2 WG1196169-3									
2,4-D	100		101		30-150	1		25	A
2,4,5-T	100		98		30-150	2		25	A
2,4,5-TP (Silvex)	99		100		30-150	1		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	101		100		30-150	A
DCAA	97		96		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-11 Batch: WG1196650-2 WG1196650-3									
2,4-D	97		102		30-150	5		30	A
2,4,5-T	71		72		30-150	1		30	A
2,4,5-TP (Silvex)	64		66		30-150	3		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	73		76		30-150	A
DCAA	70		73		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900879

Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1197817-2 WG1197817-3									
Delta-BHC	81		88		30-150	8		30	A
Lindane	78		82		30-150	5		30	A
Alpha-BHC	81		88		30-150	8		30	A
Beta-BHC	86		90		30-150	5		30	A
Heptachlor	88		94		30-150	7		30	A
Aldrin	81		85		30-150	5		30	A
Heptachlor epoxide	56		72		30-150	25		30	A
Endrin	85		90		30-150	6		30	A
Endrin aldehyde	61		65		30-150	6		30	A
Endrin ketone	74		78		30-150	5		30	A
Dieldrin	84		98		30-150	15		30	A
4,4'-DDE	80		77		30-150	4		30	A
4,4'-DDD	82		90		30-150	9		30	A
4,4'-DDT	77		84		30-150	9		30	A
Endosulfan I	78		87		30-150	11		30	A
Endosulfan II	83		89		30-150	7		30	A
Endosulfan sulfate	45		57		30-150	24		30	A
Methoxychlor	79		86		30-150	8		30	A
cis-Chlordane	70		76		30-150	8		30	A
trans-Chlordane	64		71		30-150	10		30	A

Lab Control Sample Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02 Batch: WG1197817-2 WG1197817-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	116		102		30-150	B
Decachlorobiphenyl	99		86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	91		100		30-150	A
Decachlorobiphenyl	81		84		30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-11 QC Batch ID: WG1195981-4 WG1195981-5 QC Sample: L1900879-03 Client ID: RB10_33-35													
Delta-BHC	ND	38.1	34.6	91		38.2	100		30-150	10		50	A
Lindane	ND	38.1	32.8	86		35.4	93		30-150	8		50	A
Alpha-BHC	ND	38.1	35.3	93		39.4	103		30-150	11		50	A
Beta-BHC	ND	38.1	38.5	101		40.5	106		30-150	5		50	A
Heptachlor	ND	38.1	38.8	102		43.3	113		30-150	11		50	A
Aldrin	ND	38.1	34.6	91		39.0	102		30-150	12		50	A
Heptachlor epoxide	ND	38.1	35.3	93		39.8	104		30-150	12		50	A
Endrin	ND	38.1	35.6	94		40.8	107		30-150	14		50	A
Endrin aldehyde	ND	38.1	26.0	68		31.1	82		30-150	18		50	A
Endrin ketone	ND	38.1	31.1	82		36.4	95		30-150	16		50	A
Dieldrin	ND	38.1	38.4	101		44.4	116		30-150	14		50	A
4,4'-DDE	ND	38.1	34.1	90		40.2	105		30-150	16		50	A
4,4'-DDD	ND	38.1	34.4	90		40.0	105		30-150	15		50	A
4,4'-DDT	ND	38.1	33.7	89		39.6	104		30-150	16		50	A
Endosulfan I	ND	38.1	34.5	91		39.9	105		30-150	15		50	A
Endosulfan II	ND	38.1	35.7	94		41.0	107		30-150	14		50	A
Endosulfan sulfate	ND	38.1	28.4	75		32.5	85		30-150	13		50	A
Methoxychlor	ND	38.1	35.0	92		40.9	107		30-150	16		50	A
cis-Chlordane	ND	38.1	31.8	84		37.5	98		30-150	16		50	A
trans-Chlordane	ND	38.1	31.0	81		35.5	93		30-150	14		50	A

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-11 QC Batch ID: WG1195981-4 WG1195981-5 QC Sample: L1900879-03
 Client ID: RB10_33-35

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
2,4,5,6-Tetrachloro-m-xylene	103		110		30-150	B
Decachlorobiphenyl	90		105		30-150	B
2,4,5,6-Tetrachloro-m-xylene	99		104		30-150	A
Decachlorobiphenyl	85		101		30-150	A



Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-11 QC Batch ID: WG1195981-6 WG1195981-7 QC Sample: L1900879-07 Client ID: RB15_28-30													
Delta-BHC	ND	39	38.7P	99		40.5	104		30-150	5		50	A
Lindane	ND	39	35.7	92		39.2	101		30-150	9		50	A
Alpha-BHC	ND	39	37.5	96		42.6	110		30-150	13		50	A
Beta-BHC	ND	39	38.6	99		41.3	106		30-150	7		50	A
Heptachlor	ND	39	45.9P	118		50.2	129		30-150	9		50	A
Aldrin	ND	39	35.0	90		39.1	101		30-150	11		50	A
Heptachlor epoxide	ND	39	37.2	96		34.8	90		30-150	7		50	A
Endrin	ND	39	39.4	101		41.6	107		30-150	5		50	A
Endrin aldehyde	ND	39	28.1	72		26.5	68		30-150	6		50	A
Endrin ketone	ND	39	37.4	96		36.2	93		30-150	3		50	A
Dieldrin	ND	39	39.8	102		42.1	109		30-150	6		50	A
4,4'-DDE	ND	39	35.6	91		37.5	97		30-150	5		50	A
4,4'-DDD	ND	39	38.4	99		40.1	103		30-150	4		50	A
4,4'-DDT	ND	39	38.4	99		39.8	103		30-150	4		50	A
Endosulfan I	ND	39	36.9	95		38.1	98		30-150	3		50	A
Endosulfan II	ND	39	39.7	102		40.7	105		30-150	2		50	A
Endosulfan sulfate	ND	39	33.9	87		31.8	82		30-150	6		50	A
Methoxychlor	ND	39	39.6	102		41.0	106		30-150	3		50	A
cis-Chlordane	ND	39	32.1	82		34.1	88		30-150	6		50	A
trans-Chlordane	ND	39	36.3	93		33.2	86		30-150	9		50	A

Matrix Spike Analysis**Batch Quality Control****Project Name:** GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,03-11 QC Batch ID: WG1195981-6 WG1195981-7 QC Sample: L1900879-07
Client ID: RB15_28-30

Surrogate	MS		MSD		Acceptance Criteria	Column
	% Recovery	Qualifier	% Recovery	Qualifier		
2,4,5,6-Tetrachloro-m-xylene	84		101		30-150	B
Decachlorobiphenyl	84		97		30-150	B
2,4,5,6-Tetrachloro-m-xylene	107		121		30-150	A
Decachlorobiphenyl	96		95		30-150	A

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-11 QC Batch ID: WG1196650-4 WG1196650-5 QC Sample: L1900879-03 Client ID: RB10_33-35													
2,4-D	ND	199	134J	67		158J	80		30-150	16		30	A
2,4,5-T	ND	199	175J	88		179J	90		30-150	2		30	A
2,4,5-TP (Silvex)	ND	199	176J	88		186J	94		30-150	6		30	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
DCAA	53		71		30-150	A
DCAA	64		70		30-150	B



Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-11 QC Batch ID: WG1196650-6 WG1196650-7 QC Sample: L1900879-07 Client ID: RB15_28-30													
2,4-D	ND	206	190J	92		192J	93		30-150	1		30	A
2,4,5-T	ND	206	213	103		216	105		30-150	1		30	A
2,4,5-TP (Silvex)	ND	206	197J	96		200J	97		30-150	2		30	A

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
DCAA	115		108		30-150	A
DCAA	90		90		30-150	B



METALS

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-01

Date Collected: 01/08/19 11:30

Client ID: RB10_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5840		mg/kg	8.53	2.30	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Antimony, Total	0.691	J	mg/kg	4.27	0.324	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Arsenic, Total	2.48		mg/kg	0.853	0.177	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Barium, Total	50.0		mg/kg	0.853	0.148	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.427	0.028	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Cadmium, Total	0.213	J	mg/kg	0.853	0.084	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Calcium, Total	8040		mg/kg	8.53	2.99	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Chromium, Total	14.6		mg/kg	0.853	0.082	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Cobalt, Total	8.27		mg/kg	1.71	0.142	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Copper, Total	27.1		mg/kg	0.853	0.220	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Iron, Total	17700		mg/kg	4.27	0.770	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Lead, Total	71.6		mg/kg	4.27	0.229	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Magnesium, Total	5330		mg/kg	8.53	1.31	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Manganese, Total	235		mg/kg	0.853	0.136	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Mercury, Total	0.159		mg/kg	0.070	0.015	1	01/09/19 07:00	01/09/19 21:39	EPA 7471B	1,7471B	EA
Nickel, Total	25.0		mg/kg	2.13	0.206	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Potassium, Total	1650		mg/kg	213	12.3	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Selenium, Total	0.264	J	mg/kg	1.71	0.220	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.853	0.241	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Sodium, Total	663		mg/kg	171	2.69	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.71	0.269	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Vanadium, Total	20.3		mg/kg	0.853	0.173	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
Zinc, Total	73.8		mg/kg	4.27	0.250	2	01/09/19 19:21	01/10/19 22:50	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	15		mg/kg	0.88	0.88	1		01/10/19 22:50	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-02

Date Collected: 01/08/19 11:35

Client ID: RB10_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4100		mg/kg	10.9	2.94	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Antimony, Total	0.958	J	mg/kg	5.45	0.414	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Arsenic, Total	17.2		mg/kg	1.09	0.226	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Barium, Total	57.4		mg/kg	1.09	0.190	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Beryllium, Total	0.087	J	mg/kg	0.545	0.036	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Cadmium, Total	0.556	J	mg/kg	1.09	0.107	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Calcium, Total	34100		mg/kg	10.9	3.81	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Chromium, Total	7.47		mg/kg	1.09	0.104	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Cobalt, Total	3.29		mg/kg	2.18	0.181	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Copper, Total	63.2		mg/kg	1.09	0.281	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Iron, Total	10600		mg/kg	5.45	0.984	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Lead, Total	96.8		mg/kg	5.45	0.292	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Magnesium, Total	3480		mg/kg	10.9	1.68	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Manganese, Total	248		mg/kg	1.09	0.173	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Mercury, Total	0.146		mg/kg	0.087	0.018	1	01/09/19 07:00	01/09/19 21:41	EPA 7471B	1,7471B	EA
Nickel, Total	7.74		mg/kg	2.72	0.264	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Potassium, Total	645		mg/kg	272	15.7	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Selenium, Total	12.5		mg/kg	2.18	0.281	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	1.09	0.308	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Sodium, Total	219		mg/kg	218	3.43	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	2.18	0.343	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Vanadium, Total	14.8		mg/kg	1.09	0.221	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
Zinc, Total	130		mg/kg	5.45	0.319	2	01/09/19 19:21	01/10/19 23:24	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	6.8	J	mg/kg	1.1	1.1	1		01/10/19 23:24	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-03

Date Collected: 01/08/19 11:40

Client ID: RB10_33-35

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3050		mg/kg	9.46	2.56	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.73	0.360	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Arsenic, Total	0.558	J	mg/kg	0.946	0.197	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Barium, Total	39.0		mg/kg	0.946	0.165	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Beryllium, Total	0.123	J	mg/kg	0.473	0.031	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.946	0.093	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Calcium, Total	513		mg/kg	9.46	3.31	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Chromium, Total	6.84		mg/kg	0.946	0.091	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Cobalt, Total	3.57		mg/kg	1.89	0.157	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Copper, Total	6.43		mg/kg	0.946	0.244	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Iron, Total	7460		mg/kg	4.73	0.855	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Lead, Total	3.85	J	mg/kg	4.73	0.254	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Magnesium, Total	1470		mg/kg	9.46	1.46	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Manganese, Total	284		mg/kg	0.946	0.150	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.076	0.016	1	01/09/19 07:00	01/09/19 21:20	EPA 7471B	1,7471B	EA
Nickel, Total	8.45		mg/kg	2.37	0.229	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Potassium, Total	597		mg/kg	237	13.6	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.89	0.244	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.946	0.268	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Sodium, Total	205		mg/kg	189	2.98	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.89	0.298	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Vanadium, Total	8.14		mg/kg	0.946	0.192	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
Zinc, Total	15.5		mg/kg	4.73	0.277	2	01/09/19 19:21	01/10/19 21:53	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	6.5	J	mg/kg	0.97	0.97	1		01/10/19 21:53	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-04

Date Collected: 01/08/19 13:00

Client ID: RB15_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6690		mg/kg	8.92	2.41	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.46	0.339	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Arsenic, Total	5.31		mg/kg	0.892	0.186	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Barium, Total	134		mg/kg	0.892	0.155	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.446	0.029	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Cadmium, Total	0.170	J	mg/kg	0.892	0.087	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Calcium, Total	67500		mg/kg	8.92	3.12	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Chromium, Total	11.3		mg/kg	0.892	0.086	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Cobalt, Total	4.69		mg/kg	1.78	0.148	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Copper, Total	24.4		mg/kg	0.892	0.230	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Iron, Total	10300		mg/kg	4.46	0.806	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Lead, Total	244		mg/kg	4.46	0.239	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Magnesium, Total	2380		mg/kg	8.92	1.37	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Manganese, Total	136		mg/kg	0.892	0.142	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Mercury, Total	0.076		mg/kg	0.073	0.015	1	01/09/19 07:00	01/09/19 21:43	EPA 7471B	1,7471B	EA
Nickel, Total	8.92		mg/kg	2.23	0.216	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Potassium, Total	1960		mg/kg	223	12.8	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.78	0.230	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.892	0.252	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Sodium, Total	456		mg/kg	178	2.81	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.78	0.281	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Vanadium, Total	18.7		mg/kg	0.892	0.181	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
Zinc, Total	102		mg/kg	4.46	0.261	2	01/09/19 19:21	01/10/19 22:54	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11	J	mg/kg	0.91	0.91	1		01/10/19 22:54	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-05

Date Collected: 01/08/19 13:05

Client ID: RB15_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6310		mg/kg	7.99	2.16	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Antimony, Total	0.383	J	mg/kg	3.99	0.303	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Arsenic, Total	2.99		mg/kg	0.799	0.166	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Barium, Total	56.2		mg/kg	0.799	0.139	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.399	0.026	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Cadmium, Total	0.080	J	mg/kg	0.799	0.078	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Calcium, Total	24400		mg/kg	7.99	2.80	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Chromium, Total	11.2		mg/kg	0.799	0.077	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Cobalt, Total	5.91		mg/kg	1.60	0.132	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Copper, Total	22.4		mg/kg	0.799	0.206	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Iron, Total	12800		mg/kg	3.99	0.721	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Lead, Total	69.4		mg/kg	3.99	0.214	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Magnesium, Total	3660		mg/kg	7.99	1.23	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Manganese, Total	352		mg/kg	0.799	0.127	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Mercury, Total	0.276		mg/kg	0.067	0.014	1	01/09/19 07:00	01/09/19 21:45	EPA 7471B	1,7471B	EA
Nickel, Total	9.74		mg/kg	2.00	0.193	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Potassium, Total	1290		mg/kg	200	11.5	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Selenium, Total	0.671	J	mg/kg	1.60	0.206	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.799	0.226	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Sodium, Total	186		mg/kg	160	2.52	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.60	0.252	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Vanadium, Total	15.8		mg/kg	0.799	0.162	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
Zinc, Total	53.1		mg/kg	3.99	0.234	2	01/09/19 19:21	01/10/19 22:58	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.84	0.84	1		01/10/19 22:58	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-06

Date Collected: 01/08/19 13:15

Client ID: RB15_23-25

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4200		mg/kg	9.51	2.57	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.76	0.362	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Arsenic, Total	0.999		mg/kg	0.951	0.198	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Barium, Total	5.38		mg/kg	0.951	0.166	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Beryllium, Total	0.133	J	mg/kg	0.476	0.031	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.951	0.093	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Calcium, Total	486		mg/kg	9.51	3.33	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Chromium, Total	10.7		mg/kg	0.951	0.091	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Cobalt, Total	2.64		mg/kg	1.90	0.158	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Copper, Total	8.83		mg/kg	0.951	0.245	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Iron, Total	7520		mg/kg	4.76	0.859	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Lead, Total	3.87	J	mg/kg	4.76	0.255	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Magnesium, Total	1340		mg/kg	9.51	1.46	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Manganese, Total	50.2		mg/kg	0.951	0.151	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.076	0.016	1	01/09/19 07:00	01/09/19 21:47	EPA 7471B	1,7471B	EA
Nickel, Total	6.45		mg/kg	2.38	0.230	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Potassium, Total	442		mg/kg	238	13.7	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.90	0.245	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.951	0.269	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Sodium, Total	90.2	J	mg/kg	190	3.00	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.90	0.300	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Vanadium, Total	19.8		mg/kg	0.951	0.193	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
Zinc, Total	15.3		mg/kg	4.76	0.279	2	01/09/19 19:21	01/10/19 23:28	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.97	0.97	1		01/10/19 23:28	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-07

Date Collected: 01/08/19 13:10

Client ID: RB15_28-30

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5550		mg/kg	9.65	2.61	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Antimony, Total	1.68	J	mg/kg	4.83	0.367	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Arsenic, Total	2.08		mg/kg	0.965	0.201	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Barium, Total	10.8		mg/kg	0.965	0.168	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Beryllium, Total	0.154	J	mg/kg	0.483	0.032	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.965	0.095	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Calcium, Total	814		mg/kg	9.65	3.38	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Chromium, Total	12.0		mg/kg	0.965	0.093	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Cobalt, Total	5.65		mg/kg	1.93	0.160	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Copper, Total	12.1		mg/kg	0.965	0.249	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Iron, Total	13400		mg/kg	4.83	0.872	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Lead, Total	5.27		mg/kg	4.83	0.259	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Magnesium, Total	2070		mg/kg	9.65	1.49	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Manganese, Total	831		mg/kg	0.965	0.153	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.078	0.016	1	01/09/19 07:00	01/09/19 21:31	EPA 7471B	1,7471B	EA
Nickel, Total	9.17		mg/kg	2.41	0.234	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Potassium, Total	698		mg/kg	241	13.9	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Selenium, Total	0.492	J	mg/kg	1.93	0.249	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.965	0.273	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Sodium, Total	150	J	mg/kg	193	3.04	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.93	0.304	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Vanadium, Total	13.4		mg/kg	0.965	0.196	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
Zinc, Total	24.2		mg/kg	4.83	0.283	2	01/09/19 19:21	01/10/19 22:09	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11	J	mg/kg	0.99	0.99	1		01/10/19 22:09	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-08

Date Collected: 01/08/19 10:40

Client ID: RB16_0-2

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5030		mg/kg	8.10	2.19	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Antimony, Total	2.07	J	mg/kg	4.05	0.308	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Arsenic, Total	3.40		mg/kg	0.810	0.168	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Barium, Total	44.0		mg/kg	0.810	0.141	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.405	0.027	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Cadmium, Total	0.251	J	mg/kg	0.810	0.079	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Calcium, Total	18600		mg/kg	8.10	2.84	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Chromium, Total	11.8		mg/kg	0.810	0.078	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Cobalt, Total	5.41		mg/kg	1.62	0.134	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Copper, Total	32.3		mg/kg	0.810	0.209	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Iron, Total	17200		mg/kg	4.05	0.732	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Lead, Total	288		mg/kg	4.05	0.217	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Magnesium, Total	7350		mg/kg	8.10	1.25	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Manganese, Total	302		mg/kg	0.810	0.129	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Mercury, Total	0.638		mg/kg	0.067	0.014	1	01/09/19 07:00	01/09/19 21:49	EPA 7471B	1,7471B	EA
Nickel, Total	10.2		mg/kg	2.03	0.196	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Potassium, Total	1800		mg/kg	203	11.7	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Selenium, Total	0.235	J	mg/kg	1.62	0.209	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.810	0.229	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Sodium, Total	781		mg/kg	162	2.55	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.62	0.255	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Vanadium, Total	14.4		mg/kg	0.810	0.164	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
Zinc, Total	94.4		mg/kg	4.05	0.237	2	01/09/19 19:21	01/10/19 23:32	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	12		mg/kg	0.86	0.86	1		01/10/19 23:32	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-09

Date Collected: 01/08/19 10:45

Client ID: RB16_13-15

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	12000		mg/kg	8.61	2.32	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.30	0.327	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Arsenic, Total	2.28		mg/kg	0.861	0.179	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Barium, Total	157		mg/kg	0.861	0.150	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	4.30	0.284	20	01/09/19 19:21	01/11/19 00:48	EPA 3050B	1,6010D	AB
Cadmium, Total	0.206	J	mg/kg	0.861	0.084	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Calcium, Total	2720		mg/kg	8.61	3.01	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Chromium, Total	22.0		mg/kg	0.861	0.083	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Cobalt, Total	15.2		mg/kg	1.72	0.143	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Copper, Total	77.7		mg/kg	0.861	0.222	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Iron, Total	28700		mg/kg	4.30	0.777	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Lead, Total	39.2		mg/kg	4.30	0.231	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Magnesium, Total	4990		mg/kg	8.61	1.32	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Manganese, Total	149		mg/kg	0.861	0.137	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Mercury, Total	0.460		mg/kg	0.070	0.015	1	01/09/19 07:00	01/09/19 21:54	EPA 7471B	1,7471B	EA
Nickel, Total	22.2		mg/kg	2.15	0.208	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Potassium, Total	7900		mg/kg	215	12.4	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.72	0.222	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.861	0.244	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Sodium, Total	215		mg/kg	172	2.71	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.72	0.271	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Vanadium, Total	42.8		mg/kg	0.861	0.175	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
Zinc, Total	82.0		mg/kg	4.30	0.252	2	01/09/19 19:21	01/10/19 23:36	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	22		mg/kg	0.88	0.88	1		01/10/19 23:36	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-10

Date Collected: 01/08/19 10:50

Client ID: RB16_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5860		mg/kg	9.51	2.57	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Antimony, Total	4.60	J	mg/kg	4.76	0.362	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Arsenic, Total	2.93		mg/kg	0.951	0.198	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Barium, Total	64.8		mg/kg	0.951	0.166	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.476	0.031	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Cadmium, Total	0.143	J	mg/kg	0.951	0.093	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Calcium, Total	24200		mg/kg	9.51	3.33	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Chromium, Total	10.8		mg/kg	0.951	0.091	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Cobalt, Total	4.55		mg/kg	1.90	0.158	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Copper, Total	24.0		mg/kg	0.951	0.245	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Iron, Total	12700		mg/kg	4.76	0.859	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Lead, Total	351		mg/kg	4.76	0.255	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Magnesium, Total	3750		mg/kg	9.51	1.46	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Manganese, Total	257		mg/kg	0.951	0.151	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Mercury, Total	1.45		mg/kg	0.077	0.016	1	01/09/19 07:00	01/09/19 21:56	EPA 7471B	1,7471B	EA
Nickel, Total	8.44		mg/kg	2.38	0.230	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Potassium, Total	1010		mg/kg	238	13.7	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Selenium, Total	0.380	J	mg/kg	1.90	0.245	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.951	0.269	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Sodium, Total	110	J	mg/kg	190	3.00	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.90	0.300	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Vanadium, Total	17.2		mg/kg	0.951	0.193	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
Zinc, Total	59.0		mg/kg	4.76	0.279	2	01/09/19 19:21	01/10/19 23:40	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.97	0.97	1		01/10/19 23:40	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-11
 Client ID: SODUP05_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4490		mg/kg	9.43	2.55	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Antimony, Total	ND		mg/kg	4.72	0.358	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Arsenic, Total	2.19		mg/kg	0.943	0.196	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Barium, Total	7.45		mg/kg	0.943	0.164	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Beryllium, Total	0.151	J	mg/kg	0.472	0.031	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.943	0.093	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Calcium, Total	493		mg/kg	9.43	3.30	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Chromium, Total	11.1		mg/kg	0.943	0.091	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Cobalt, Total	3.48		mg/kg	1.89	0.157	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Copper, Total	9.26		mg/kg	0.943	0.243	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Iron, Total	10200		mg/kg	4.72	0.852	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Lead, Total	6.01		mg/kg	4.72	0.253	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Magnesium, Total	1520		mg/kg	9.43	1.45	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Manganese, Total	67.5		mg/kg	0.943	0.150	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Mercury, Total	ND		mg/kg	0.076	0.016	1	01/09/19 07:00	01/09/19 21:58	EPA 7471B	1,7471B	EA
Nickel, Total	6.86		mg/kg	2.36	0.228	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Potassium, Total	591		mg/kg	236	13.6	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.89	0.243	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.943	0.267	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Sodium, Total	91.8	J	mg/kg	189	2.97	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.89	0.297	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Vanadium, Total	12.8		mg/kg	0.943	0.192	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
Zinc, Total	16.6		mg/kg	4.72	0.276	2	01/09/19 19:21	01/10/19 23:45	EPA 3050B	1,6010D	AB
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.96	0.96	1		01/10/19 23:45	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-12
 Client ID: SOFB04_010819
 Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
 Date Received: 01/08/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	ND		mg/l	0.100	0.032	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Antimony, Total	ND		mg/l	0.050	0.007	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Arsenic, Total	ND		mg/l	0.005	0.002	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Barium, Total	0.002	J	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Beryllium, Total	ND		mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Cadmium, Total	ND		mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Calcium, Total	0.058	J	mg/l	0.100	0.035	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Chromium, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Cobalt, Total	ND		mg/l	0.020	0.002	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Copper, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Iron, Total	ND		mg/l	0.050	0.009	1	01/09/19 13:02	01/14/19 15:57	EPA 3005A	1,6010D	AB
Lead, Total	ND		mg/l	0.010	0.003	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Magnesium, Total	ND		mg/l	0.100	0.015	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Manganese, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Mercury, Total	ND		mg/l	0.00020	0.00006	1	01/09/19 11:16	01/09/19 17:20	EPA 7470A	1,7470A	MG
Nickel, Total	ND		mg/l	0.025	0.002	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Potassium, Total	ND		mg/l	2.50	0.237	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Selenium, Total	ND		mg/l	0.010	0.004	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Silver, Total	ND		mg/l	0.007	0.003	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Sodium, Total	ND		mg/l	2.00	0.120	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Thallium, Total	ND		mg/l	0.020	0.003	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Vanadium, Total	ND		mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
Zinc, Total	ND		mg/l	0.050	0.002	1	01/09/19 13:02	01/09/19 22:56	EPA 3005A	1,6010D	MC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	0.010	1		01/09/19 22:56	NA	107,-	



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11 Batch: WG1195927-1									
Mercury, Total	ND	mg/kg	0.083	0.018	1	01/09/19 07:00	01/09/19 21:16	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 12 Batch: WG1196029-1									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	01/09/19 11:16	01/09/19 16:44	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 12 Batch: WG1196054-1									
Aluminum, Total	ND	mg/l	0.100	0.032	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Antimony, Total	ND	mg/l	0.050	0.007	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Arsenic, Total	ND	mg/l	0.005	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Barium, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Beryllium, Total	ND	mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Cadmium, Total	ND	mg/l	0.005	0.001	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Calcium, Total	ND	mg/l	0.100	0.035	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Chromium, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Cobalt, Total	ND	mg/l	0.020	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Copper, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Iron, Total	ND	mg/l	0.050	0.009	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Lead, Total	ND	mg/l	0.010	0.003	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Magnesium, Total	ND	mg/l	0.100	0.015	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Manganese, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Nickel, Total	ND	mg/l	0.025	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Potassium, Total	ND	mg/l	2.50	0.237	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis Batch Quality Control

Selenium, Total	ND	mg/l	0.010	0.004	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Silver, Total	ND	mg/l	0.007	0.003	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Sodium, Total	ND	mg/l	2.00	0.120	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Thallium, Total	ND	mg/l	0.020	0.003	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Vanadium, Total	ND	mg/l	0.010	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC
Zinc, Total	ND	mg/l	0.050	0.002	1	01/09/19 13:02	01/09/19 20:34	1,6010D	MC

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-11 Batch: WG1196160-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Antimony, Total	0.152	J	mg/kg	2.00	0.152	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	01/09/19 19:21	01/10/19 23:11	1,6010D	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Iron, Total	1.26	J	mg/kg	2.00	0.361	1	01/09/19 19:21	01/10/19 23:11	1,6010D	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Manganese, Total	0.396	J	mg/kg	0.400	0.064	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Nickel, Total	0.320	J	mg/kg	1.00	0.097	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Potassium, Total	ND		mg/kg	100	5.76	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Sodium, Total	ND		mg/kg	80.0	1.26	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	01/09/19 19:21	01/10/19 21:44	1,6010D	AB



Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.

Project Number: 170487001

Lab Number: L1900879

Report Date: 01/18/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1195927-2 SRM Lot Number: D101-540								
Mercury, Total	70		-		65-135	-		
Total Metals - Mansfield Lab Associated sample(s): 12 Batch: WG1196029-2								
Mercury, Total	103		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 Batch: WG1196054-2					
Aluminum, Total	96	-	80-120	-	
Antimony, Total	95	-	80-120	-	
Arsenic, Total	106	-	80-120	-	
Barium, Total	93	-	80-120	-	
Beryllium, Total	93	-	80-120	-	
Cadmium, Total	102	-	80-120	-	
Calcium, Total	98	-	80-120	-	
Chromium, Total	95	-	80-120	-	
Cobalt, Total	94	-	80-120	-	
Copper, Total	94	-	80-120	-	
Iron, Total	98	-	80-120	-	
Lead, Total	100	-	80-120	-	
Magnesium, Total	101	-	80-120	-	
Manganese, Total	91	-	80-120	-	
Nickel, Total	95	-	80-120	-	
Potassium, Total	94	-	80-120	-	
Selenium, Total	114	-	80-120	-	
Silver, Total	101	-	80-120	-	
Sodium, Total	96	-	80-120	-	
Thallium, Total	102	-	80-120	-	
Vanadium, Total	98	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 Batch: WG1196054-2					
Zinc, Total	101	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1196160-2 SRM Lot Number: D101-540					
Aluminum, Total	67	-	50-151	-	
Antimony, Total	152	-	3-196	-	
Arsenic, Total	98	-	83-117	-	
Barium, Total	87	-	83-118	-	
Beryllium, Total	90	-	83-117	-	
Cadmium, Total	91	-	83-117	-	
Calcium, Total	85	-	81-119	-	
Chromium, Total	92	-	81-118	-	
Cobalt, Total	92	-	84-116	-	
Copper, Total	91	-	83-116	-	
Iron, Total	95	-	62-138	-	
Lead, Total	97	-	83-117	-	
Magnesium, Total	80	-	76-124	-	
Manganese, Total	87	-	82-118	-	
Nickel, Total	92	-	82-117	-	
Potassium, Total	82	-	71-130	-	
Selenium, Total	93	-	79-121	-	
Silver, Total	93	-	80-120	-	
Sodium, Total	98	-	72-127	-	
Thallium, Total	90	-	81-119	-	
Vanadium, Total	94	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 Batch: WG1196160-2 SRM Lot Number: D101-540					
Zinc, Total	93	-	81-119	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1195927-3 WG1195927-4 QC Sample: L1900879-03 Client ID: RB10_33-35												
Mercury, Total	ND	0.153	0.129	84		0.126	82		80-120	2		20
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1195927-5 WG1195927-6 QC Sample: L1900879-07 Client ID: RB15_28-30												
Mercury, Total	ND	0.155	0.144	93		0.147	95		80-120	2		20
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1196029-3 WG1196029-4 QC Sample: L1900689-04 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00471	94		0.00490	98		75-125	4		20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1196054-3 QC Sample: L1900487-09 Client ID: MS Sample									
Aluminum, Total	ND	2	1.95	98	-	-	75-125	-	20
Antimony, Total	ND	0.5	0.473	95	-	-	75-125	-	20
Arsenic, Total	ND	0.12	0.125	104	-	-	75-125	-	20
Barium, Total	ND	2	1.90	95	-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.048	96	-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.052	102	-	-	75-125	-	20
Calcium, Total	0.066J	10	9.95	100	-	-	75-125	-	20
Chromium, Total	ND	0.2	0.190	95	-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.468	94	-	-	75-125	-	20
Copper, Total	ND	0.25	0.234	94	-	-	75-125	-	20
Iron, Total	0.020J	1	1.02	102	-	-	75-125	-	20
Lead, Total	ND	0.51	0.508	100	-	-	75-125	-	20
Magnesium, Total	0.033J	10	10.5	105	-	-	75-125	-	20
Manganese, Total	ND	0.5	0.460	92	-	-	75-125	-	20
Nickel, Total	ND	0.5	0.472	94	-	-	75-125	-	20
Potassium, Total	ND	10	9.69	97	-	-	75-125	-	20
Selenium, Total	ND	0.12	0.134	112	-	-	75-125	-	20
Silver, Total	ND	0.05	0.050	100	-	-	75-125	-	20
Sodium, Total	0.191J	10	9.93	99	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.120	100	-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.482	96	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1196054-3 QC Sample: L1900487-09 Client ID: MS Sample									
Zinc, Total	0.007J	0.5	0.508	102	-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits		
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1196160-3 WG1196160-4 QC Sample: L1900879-03 Client ID: RB10_33-35											
Aluminum, Total	3050	187	3450	214	Q	3410	190	Q	75-125	1	20
Antimony, Total	ND	46.7	39.0	83		40.5	86		75-125	4	20
Arsenic, Total	0.558J	11.2	11.6	103		12.3	108		75-125	6	20
Barium, Total	39.0	187	259	118		243	108		75-125	6	20
Beryllium, Total	0.123J	4.67	4.19	90		4.39	93		75-125	5	20
Cadmium, Total	ND	4.77	4.56	96		4.76	99		75-125	4	20
Calcium, Total	513	935	1420	97		1510	105		75-125	6	20
Chromium, Total	6.84	18.7	23.2	87		24.2	92		75-125	4	20
Cobalt, Total	3.57	46.7	44.7	88		46.4	90		75-125	4	20
Copper, Total	6.43	23.4	26.9	88		28.2	92		75-125	5	20
Iron, Total	7460	93.5	7510	53	Q	7790	349	Q	75-125	4	20
Lead, Total	3.85J	47.7	47.0	98		49.0	102		75-125	4	20
Magnesium, Total	1470	935	2330	92		2410	99		75-125	3	20
Manganese, Total	284	46.7	327	92		320	76		75-125	2	20
Nickel, Total	8.45	46.7	49.7	88		51.7	91		75-125	4	20
Potassium, Total	597	935	1560	103		1550	101		75-125	1	20
Selenium, Total	ND	11.2	10.7	95		11.1	98		75-125	4	20
Silver, Total	ND	28	28.1	100		29.2	103		75-125	4	20
Sodium, Total	205	935	1110	97		1150	100		75-125	4	20
Thallium, Total	ND	11.2	9.10	81		9.45	83		75-125	4	20
Vanadium, Total	8.14	46.7	51.2	92		53.5	96		75-125	4	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1196160-3 WG1196160-4 QC Sample: L1900879-03 Client ID: RB10_33-35									
Zinc, Total	15.5	46.7	58.7	92	61.3	97	75-125	4	20

Matrix Spike Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits		
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1196160-7 WG1196160-8 QC Sample: L1900879-07 Client ID: RB15_28-30											
Aluminum, Total	5550	193	5930	197	Q	6130	296	Q	75-125	3	20
Antimony, Total	1.68J	48.3	37.7	78		38.8	79		75-125	3	20
Arsenic, Total	2.08	11.6	12.8	92		13.0	93		75-125	2	20
Barium, Total	10.8	193	179	87		184	88		75-125	3	20
Beryllium, Total	0.154J	4.83	4.18	86		4.28	87		75-125	2	20
Cadmium, Total	ND	4.92	4.40	89		4.47	90		75-125	2	20
Calcium, Total	814	965	1560	77		1590	79		75-125	2	20
Chromium, Total	12.0	19.3	29.3	90		29.1	87		75-125	1	20
Cobalt, Total	5.65	48.3	45.2	82		46.3	83		75-125	2	20
Copper, Total	12.1	24.1	32.9	86		32.7	84		75-125	1	20
Iron, Total	13400	96.5	13200	0	Q	13500	102		75-125	2	20
Lead, Total	5.27	49.2	47.2	85		47.9	85		75-125	1	20
Magnesium, Total	2070	965	2880	84		2960	91		75-125	3	20
Manganese, Total	831	48.3	604	0	Q	502	0	Q	75-125	18	20
Nickel, Total	9.17	48.3	49.0	82		49.8	83		75-125	2	20
Potassium, Total	698	965	1600	93		1700	102		75-125	6	20
Selenium, Total	0.492J	11.6	10.5	91		10.6	90		75-125	1	20
Silver, Total	ND	29	28.2	97		27.9	95		75-125	1	20
Sodium, Total	150J	965	1070	111		1100	112		75-125	3	20
Thallium, Total	ND	11.6	8.45	73	Q	8.57	73	Q	75-125	1	20
Vanadium, Total	13.4	48.3	55.7	88		55.9	87		75-125	0	20

Matrix Spike Analysis
Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1196160-7 WG1196160-8 QC Sample: L1900879-07 Client ID: RB15_28-30									
Zinc, Total	24.2	48.3	66.2	87	67.5	88	75-125	2	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1196054-4 QC Sample: L1900487-09 Client ID: DUP Sample						
Aluminum, Total	ND	ND	mg/l	NC		20
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	ND	0.003J	mg/l	NC		20
Barium, Total	ND	0.002J	mg/l	NC		20
Beryllium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	ND	ND	mg/l	NC		20
Calcium, Total	0.066J	0.065J	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Cobalt, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Magnesium, Total	0.033J	0.028J	mg/l	NC		20
Manganese, Total	ND	ND	mg/l	NC		20
Nickel, Total	ND	ND	mg/l	NC		20
Potassium, Total	ND	ND	mg/l	NC		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Sodium, Total	0.191J	0.289J	mg/l	NC		20
Thallium, Total	ND	ND	mg/l	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1196054-4 QC Sample: L1900487-09 Client ID: DUP Sample					
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.007J	0.006J	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 12 QC Batch ID: WG1196054-4 QC Sample: L1900487-09 Client ID: DUP Sample					
Iron, Total	0.020J	0.015J	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-01
Client ID: RB10_0-2
Sample Location: BRONX, NY

Date Collected: 01/08/19 11:30
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.5		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/09/19 11:35	01/09/19 14:04	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.884	0.177	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-02
Client ID: RB10_18-20
Sample Location: BRONX, NY

Date Collected: 01/08/19 11:35
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	72.4		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.4	0.29	1	01/09/19 11:35	01/09/19 14:07	1,9010C/9012B	LH
Chromium, Hexavalent	0.663	J	mg/kg	1.10	0.221	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-03
Client ID: RB10_33-35
Sample Location: BRONX, NY

Date Collected: 01/08/19 11:40
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.6		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/09/19 11:35	01/09/19 14:08	1,9010C/9012B	LH
Chromium, Hexavalent	0.363	J	mg/kg	0.968	0.194	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-04
Client ID: RB15_0-2
Sample Location: BRONX, NY

Date Collected: 01/08/19 13:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.9		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/09/19 11:35	01/09/19 14:12	1,9010C/9012B	LH
Chromium, Hexavalent	0.284	J	mg/kg	0.910	0.182	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-05

Date Collected: 01/08/19 13:05

Client ID: RB15_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.8		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	0.31	J	mg/kg	0.95	0.20	1	01/09/19 11:35	01/09/19 14:13	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.835	0.167	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-06

Date Collected: 01/08/19 13:15

Client ID: RB15_23-25

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.7		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	01/09/19 11:35	01/09/19 14:14	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.967	0.193	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-07
Client ID: RB15_28-30
Sample Location: BRONX, NY

Date Collected: 01/08/19 13:10
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.8		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.26	1	01/09/19 12:50	01/09/19 15:15	1,9010C/9012B	LH
Chromium, Hexavalent	0.718	J	mg/kg	0.990	0.198	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-08
Client ID: RB16_0-2
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:40
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.4		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/09/19 11:35	01/09/19 14:15	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.856	0.171	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-09
Client ID: RB16_13-15
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:45
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.9		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	01/09/19 11:35	01/09/19 14:16	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.880	0.176	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**SAMPLE RESULTS**

Lab ID: L1900879-10

Date Collected: 01/08/19 10:50

Client ID: RB16_18-20

Date Received: 01/08/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.5		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	01/09/19 11:35	01/09/19 14:17	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.970	0.194	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-11
Client ID: SODUP05_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 00:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.0		%	0.100	NA	1	-	01/09/19 12:58	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	01/09/19 11:35	01/09/19 14:20	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.964	0.193	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

SAMPLE RESULTS

Lab ID: L1900879-12
Client ID: SOFB04_010819
Sample Location: BRONX, NY

Date Collected: 01/08/19 10:00
Date Received: 01/08/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	01/09/19 14:35	01/10/19 13:59	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/09/19 03:30	01/09/19 03:46	1,7196A	MA



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 12 Batch: WG1195895-1									
Chromium, Hexavalent	ND	mg/l	0.010	0.003	1	01/09/19 03:30	01/09/19 03:45	1,7196A	MA
General Chemistry - Westborough Lab for sample(s): 01-06,08-11 Batch: WG1196013-1									
Cyanide, Total	ND	mg/kg	0.98	0.21	1	01/09/19 11:35	01/09/19 13:44	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 07 Batch: WG1196064-1									
Cyanide, Total	ND	mg/kg	0.94	0.20	1	01/09/19 12:50	01/09/19 14:59	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 12 Batch: WG1196095-1									
Cyanide, Total	ND	mg/l	0.005	0.001	1	01/09/19 02:35	01/10/19 13:19	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-06,08-11 Batch: WG1196213-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ
General Chemistry - Westborough Lab for sample(s): 07 Batch: WG1196215-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	01/09/19 18:00	01/10/19 18:35	1,7196A	AJ

Lab Control Sample Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
General Chemistry - Westborough Lab Associated sample(s): 12 Batch: WG1195895-2								
Chromium, Hexavalent	95		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-06,08-11 Batch: WG1196013-2 WG1196013-3								
Cyanide, Total	50	Q	75	Q	80-120	47	Q	35
General Chemistry - Westborough Lab Associated sample(s): 07 Batch: WG1196064-2 WG1196064-3								
Cyanide, Total	112		87		80-120	39	Q	35
General Chemistry - Westborough Lab Associated sample(s): 12 Batch: WG1196095-2 WG1196095-3								
Cyanide, Total	103		101		85-115	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-06,08-11 Batch: WG1196213-2								
Chromium, Hexavalent	79	Q	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 07 Batch: WG1196215-2								
Chromium, Hexavalent	79	Q	-		80-120	-		20

Matrix Spike Analysis Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 12 QC Batch ID: WG1195895-4 QC Sample: L1900879-12 Client ID: SOFB04_010819												
Chromium, Hexavalent	ND	0.1	0.099	99	-	-	-	-	85-115	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01-06,08-11 QC Batch ID: WG1196013-4 WG1196013-5 QC Sample: L1900879-03 Client ID: RB10_33-35												
Cyanide, Total	ND	11	10	89	11	97	97	Q	75-125	10	Q	35
General Chemistry - Westborough Lab Associated sample(s): 07 QC Batch ID: WG1196064-4 WG1196064-5 QC Sample: L1900879-07 Client ID: RB15_28-30												
Cyanide, Total	ND	12	12	99	4.6	39	39	Q	75-125	89	Q	35
General Chemistry - Westborough Lab Associated sample(s): 12 QC Batch ID: WG1196095-4 WG1196095-5 QC Sample: L1900885-11 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.197	98	0.194	97	97	Q	80-120	2	Q	20
General Chemistry - Westborough Lab Associated sample(s): 01-06,08-11 QC Batch ID: WG1196213-4 WG1196213-5 QC Sample: L1900879-03 Client ID: RB10_33-35												
Chromium, Hexavalent	0.363J	952	1000	105	1020	106	106	Q	75-125	2	Q	20
General Chemistry - Westborough Lab Associated sample(s): 07 QC Batch ID: WG1196215-4 WG1196215-5 QC Sample: L1900879-07 Client ID: RB15_28-30												
Chromium, Hexavalent	0.718J	1050	827	78	1190	87	87	Q	75-125	11	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 12 QC Batch ID: WG1195895-3 QC Sample: L1900879-12 Client ID: SOFB04_010819						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-11 QC Batch ID: WG1196051-1 QC Sample: L1900879-03 Client ID: RB10_33-35						
Solids, Total	82.6	82.6	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-06,08-11 QC Batch ID: WG1196213-7 QC Sample: L1900879-03 Client ID: RB10_33-35						
Chromium, Hexavalent	0.363J	0.230J	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 07 QC Batch ID: WG1196215-7 QC Sample: L1900879-07 Client ID: RB15_28-30						
Chromium, Hexavalent	0.718J	0.520J	mg/kg	NC		20

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900879-01A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-01B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-01C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-01D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-01E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-01F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-01G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-02A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-02B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-02C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-02D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-02E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-02F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01181914:41
Lab Number: L1900879
Report Date: 01/18/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900879-02G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-03A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-03A1	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-03A2	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-03B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-03B1	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-03B2	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-03C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-03C1	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-03C2	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-03D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-03D1	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-03D2	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-03E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-03E1	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-03E2	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-03F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-03F1	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Serial_No:01181914:41
Lab Number: L1900879
Report Date: 01/18/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900879-03F2	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-03G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-03G1	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-03G2	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-04A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-04B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-04C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-04D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-04E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-04F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-04G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-05A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-05B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-05C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-05D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-05E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-05F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900879-05G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-06A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-06B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-06C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-06D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-06E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-06F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-06G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-07A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-07A1	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-07A2	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-07B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-07B1	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-07B2	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-07C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-07C1	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-07C2	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-07D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-07D1	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-07D2	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-07E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900879-07E1	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-07E2	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-07F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-07F1	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-07F2	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-07G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-07G1	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-07G2	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-08A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-08B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-08C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-08D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-08E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-08F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

Project Name: GERARD AVE. + E. 146TH ST.**Lab Number:** L1900879**Project Number:** 170487001**Report Date:** 01/18/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900879-08G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-09A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-09B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-09C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-09D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-09E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-09F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-09G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-10A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-10B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-10C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-10D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)
L1900879-10E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-10F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-10G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-11A	Vial MeOH preserved	A	NA		2.9	Y	Absent		NYTCL-8260HLW(14)
L1900879-11B	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-11C	Vial water preserved	A	NA		2.9	Y	Absent	09-JAN-19 03:32	NYTCL-8260HLW(14)
L1900879-11D	Plastic 2oz unpreserved for TS	A	NA		2.9	Y	Absent		TS(7)

Project Name: GERARD AVE. + E. 146TH ST.

Lab Number: L1900879

Project Number: 170487001

Report Date: 01/18/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1900879-11E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-11F	Glass 120ml/4oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-11G	Glass 500ml/16oz unpreserved	B	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1900879-12A	Vial HCl preserved	C	NA		3.5	Y	Absent		NYTCL-8260(14)
L1900879-12B	Vial HCl preserved	C	NA		3.5	Y	Absent		NYTCL-8260(14)
L1900879-12C	Vial HCl preserved	C	NA		3.5	Y	Absent		NYTCL-8260(14)
L1900879-12D	Plastic 250ml HNO3 preserved	C	<2	<2	3.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1900879-12E	Plastic 250ml NaOH preserved	C	>12	>12	3.5	Y	Absent		TCN-9010(14)
L1900879-12F	Plastic 500ml unpreserved	C	7	7	3.5	Y	Absent		HEXCR-7196(1)
L1900879-12G	Amber 120ml unpreserved	C	7	7	3.5	Y	Absent		NYTCL-8082-LVI(7)
L1900879-12H	Amber 120ml unpreserved	C	7	7	3.5	Y	Absent		NYTCL-8082-LVI(7)
L1900879-12I	Amber 120ml unpreserved	C	7	7	3.5	Y	Absent		NYTCL-8081(7)
L1900879-12J	Amber 120ml unpreserved	C	7	7	3.5	Y	Absent		NYTCL-8081(7)
L1900879-12K	Amber 250ml unpreserved	C	7	7	3.5	Y	Absent		NYTCL-8270-LVI(7)
L1900879-12L	Amber 250ml unpreserved	C	7	7	3.5	Y	Absent		NYTCL-8270-LVI(7)
L1900879-12M	Amber 1000ml unpreserved	C	7	7	3.5	Y	Absent		HERB-APA(7)
L1900879-12N	Amber 1000ml unpreserved	C	7	7	3.5	Y	Absent		HERB-APA(7)
L1900879-13A	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)
L1900879-13B	Vial HCl preserved	A	NA		2.9	Y	Absent		NYTCL-8260(14)

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

Lab Number: L1900879
Report Date: 01/18/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: GERARD AVE. + E. 146TH ST.
Project Number: 170487001

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Report Date: 01/18/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 ALPHA ANALYTICAL <small>ANALYTICAL SERVICES</small>	NEW YORK CHAIN OF CUSTODY	<u>Service Centers</u> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #										
			1 of 2	1/9/19	21900879										
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information Project Name: Gerard Ave. + E. 146th St. Project Location: Bronx NY Project # 170487001 (Use Project name as Project #) <input type="checkbox"/>		Deliverables <input checked="" type="checkbox"/> ASPA ¹⁻⁸⁻¹⁹ <input type="checkbox"/> EQulS (1 File) <input checked="" type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other	Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #										
Client Information Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jlchung@langan.com		Project Manager: Julia Leung ALPHAQuote #:		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:									
These samples have been previously analyzed by Alpha <input type="checkbox"/>		Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		ANALYSIS		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)									
Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.						T o t a l B o t t l e									
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials		Part 375/TCL VOCs	Part 375/TCL SVOCs	Part 375/TCL PCBs	Pesticides	Herbicides	TAL Metals	Hexavalent Chromium	Total Cyanide	Sample Specific Comments
		Date	Time												
00879-01	RB10_0-2	1/8/19	1130	Soil	JL		X	X	X	X	X	X	X	X	
-02	RB10_18-20		1135		JL										
-03	RB10_33-35		1140		JL										MS/MSD collected
-04	RB15_0-2		1300		JL										
-05	RB15_18-20		1305		JL										
-06	RB15_23-25		1315		JL										
-07	RB15_28-30		1310		JL										MS/MSD collected
-08	RB16_0-2		1040		JL										
-09	RB16_13-15		1045		JL										
-10	RB16_18-20		1050		JL										
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative						Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
		Relinquished By:		Date/Time		Received By:		Date/Time							
		JL		1/8/19 - 4:45 PM		Paul Mayella		1/8/19 1645							
		Paul Mayella		1/9/19 00345		JL		1/9/19 0045							

 NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab		ALPHA Job #	
		2 of 2	1/9/19		4900879	
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Project Information			Deliverables	Billing Information
Project Name: Gerard Ave. + E. 146th St. Project Location: Bronx NY Project # 170487001		<input checked="" type="checkbox"/> ASP-A (1-3-19) <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQulS (1 File) <input checked="" type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Same as Client Info PO #	
Client Information		Regulatory Requirement			Disposal Site Information	
Client: Langan Engineering Address: 21 Penn Plaza, 360 W. 31st St 8th Fl., NY, NY 10001-2727 Phone: (212) 479-5400 Fax: (212) 479-5444 Email: jleung@langan.com		<input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge			Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:	
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		ANALYSIS			Sample Filtration	
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: Please also cc: datamanagement@langan.com and vzuluaga@langan.com Please specify Metals or TAL.		Part 375/TCL VOCs Part 375/TCL SVOCs Part 375/TCL PCBs Pesticides Herbicides TAL Metals Hexavalent Chromium Total Cyanide	<input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Preservation <input type="checkbox"/> Lab to do (Please Specify below)		T o t a l B o t t l e	
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix		Sampler's Initials
06879-11	SODUP05_010819	1/8/19	-	Soil	JL	
-12	SOFB04_010819	↓	1000	AQ	SA	
-13	SOTB07_010819	-	-	AQ	SA	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)
Container Type Preservative		Relinquished By: <i>[Signature]</i> Date/Time: 1/8/19 - 4:45 PM		Received By: <i>[Signature]</i> Date/Time: 1/8/19 16:47		
Form No: 01-25 HC (rev. 30-Sept-2013)		Relinquished By: <i>[Signature]</i> Date/Time: 1/9/19 19:00		Received By: <i>[Signature]</i> Date/Time: 1/8/19 20:00		
Relinquished By: <i>[Signature]</i> Date/Time: 1/9/19 00:45		Received By: <i>[Signature]</i> Date/Time: 1/9/19 00:45				



ANALYTICAL REPORT

Lab Number:	L1930096
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Julia Leung
Phone:	(212) 479-5400
Project Name:	404 EXTERIOR STREET
Project Number:	170487001
Report Date:	07/29/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1930096-01	RB24_0-2	SOIL	BRONX, NY	07/10/19 11:45	07/10/19
L1930096-02	RB24_8-10	SOIL	BRONX, NY	07/10/19 11:55	07/10/19
L1930096-03	RB24_13-15	SOIL	BRONX, NY	07/10/19 12:15	07/10/19
L1930096-04	RB26_0-2	SOIL	BRONX, NY	07/10/19 12:45	07/10/19
L1930096-05	RB26_10-12	SOIL	BRONX, NY	07/10/19 13:00	07/10/19
L1930096-06	RB26_14-16	SOIL	BRONX, NY	07/10/19 13:05	07/10/19
L1930096-07	RB23_0-2	SOIL	BRONX, NY	07/10/19 13:55	07/10/19
L1930096-08	RB23_10-12	SOIL	BRONX, NY	07/10/19 14:05	07/10/19
L1930096-09	RB23_13-15	SOIL	BRONX, NY	07/10/19 14:10	07/10/19
L1930096-10	SOFB05_071019	WATER	BRONX, NY	07/10/19 14:50	07/10/19
L1930096-11	SOTB06_071019	WATER	BRONX, NY	07/10/19 00:00	07/10/19

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Case Narrative (continued)

Report Submission

July 29, 2019: This final report includes the results of all requested analyses.

July 12, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L1930096-10: The collection date and time on the chain of custody was 10-JUL-19 14:55; however, the collection date/time on the container label was 10-JUL-19 14:50. At the client's request, the collection date/time is reported as 10-JUL-19 14:50.

L1930096-10: Only the analysis of PFAs was performed, at the client's request.

Volatile Organics

L1930096-04 and -07: The surrogate recovery is below the acceptance criteria for dibromofluoromethane (62% and 68%, respectively), possibly due to the matrix effect caused by the high pH of the sample (>10).

Perfluorinated Alkyl Acids by Isotope Dilution

WG1263769-1: The continuing calibration standard had the response for 1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS) outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.

WG1264962-3: The continuing calibration standard had the response for 8:2FTS and NMeFOSAA outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.

Total Metals

L1930096-01 through -09: The sample has elevated detection limits for all elements, with the exception of

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Case Narrative (continued)

mercury, due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1258510-2 LCS recovery (61%), associated with L1930096-01 through -09, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Amita Naik

Title: Technical Director/Representative

Date: 07/29/19

ORGANICS

VOLATILES

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
 Client ID: RB24_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 08:09
 Analyst: JC
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.8	4.0	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.25	1
Chloroform	ND		ug/kg	2.6	0.24	1
Carbon tetrachloride	ND		ug/kg	1.8	0.40	1
1,2-Dichloropropane	ND		ug/kg	1.8	0.22	1
Dibromochloromethane	ND		ug/kg	1.8	0.24	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.47	1
Tetrachloroethene	ND		ug/kg	0.88	0.34	1
Chlorobenzene	ND		ug/kg	0.88	0.22	1
Trichlorofluoromethane	ND		ug/kg	7.0	1.2	1
1,2-Dichloroethane	ND		ug/kg	1.8	0.45	1
1,1,1-Trichloroethane	ND		ug/kg	0.88	0.29	1
Bromodichloromethane	ND		ug/kg	0.88	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.8	0.48	1
cis-1,3-Dichloropropene	ND		ug/kg	0.88	0.28	1
1,3-Dichloropropene, Total	ND		ug/kg	0.88	0.28	1
1,1-Dichloropropene	ND		ug/kg	0.88	0.28	1
Bromoform	ND		ug/kg	7.0	0.43	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.88	0.29	1
Benzene	ND		ug/kg	0.88	0.29	1
Toluene	ND		ug/kg	1.8	0.95	1
Ethylbenzene	ND		ug/kg	1.8	0.25	1
Chloromethane	ND		ug/kg	7.0	1.6	1
Bromomethane	ND		ug/kg	3.5	1.0	1
Vinyl chloride	ND		ug/kg	1.8	0.59	1
Chloroethane	ND		ug/kg	3.5	0.79	1
1,1-Dichloroethene	ND		ug/kg	1.8	0.42	1
trans-1,2-Dichloroethene	ND		ug/kg	2.6	0.24	1

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01

Date Collected: 07/10/19 11:45

Client ID: RB24_0-2

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.88	0.24	1
1,2-Dichlorobenzene	ND		ug/kg	3.5	0.25	1
1,3-Dichlorobenzene	ND		ug/kg	3.5	0.26	1
1,4-Dichlorobenzene	ND		ug/kg	3.5	0.30	1
Methyl tert butyl ether	ND		ug/kg	3.5	0.35	1
p/m-Xylene	ND		ug/kg	3.5	0.98	1
o-Xylene	ND		ug/kg	1.8	0.51	1
Xylenes, Total	ND		ug/kg	1.8	0.51	1
cis-1,2-Dichloroethene	ND		ug/kg	1.8	0.31	1
1,2-Dichloroethene, Total	ND		ug/kg	1.8	0.24	1
Dibromomethane	ND		ug/kg	3.5	0.42	1
Styrene	ND		ug/kg	1.8	0.34	1
Dichlorodifluoromethane	ND		ug/kg	18	1.6	1
Acetone	ND		ug/kg	18	8.4	1
Carbon disulfide	ND		ug/kg	18	8.0	1
2-Butanone	ND		ug/kg	18	3.9	1
Vinyl acetate	ND		ug/kg	18	3.8	1
4-Methyl-2-pentanone	ND		ug/kg	18	2.2	1
1,2,3-Trichloropropane	ND		ug/kg	3.5	0.22	1
2-Hexanone	ND		ug/kg	18	2.1	1
Bromochloromethane	ND		ug/kg	3.5	0.36	1
2,2-Dichloropropane	ND		ug/kg	3.5	0.35	1
1,2-Dibromoethane	ND		ug/kg	1.8	0.49	1
1,3-Dichloropropane	ND		ug/kg	3.5	0.29	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.88	0.23	1
Bromobenzene	ND		ug/kg	3.5	0.25	1
n-Butylbenzene	ND		ug/kg	1.8	0.29	1
sec-Butylbenzene	ND		ug/kg	1.8	0.26	1
tert-Butylbenzene	ND		ug/kg	3.5	0.21	1
o-Chlorotoluene	ND		ug/kg	3.5	0.33	1
p-Chlorotoluene	ND		ug/kg	3.5	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	1.7	1
Hexachlorobutadiene	ND		ug/kg	7.0	0.30	1
Isopropylbenzene	ND		ug/kg	1.8	0.19	1
p-Isopropyltoluene	ND		ug/kg	1.8	0.19	1
Naphthalene	ND		ug/kg	7.0	1.1	1
Acrylonitrile	ND		ug/kg	7.0	2.0	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
Client ID: RB24_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.8	0.30	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.5	0.56	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.5	0.48	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.5	0.34	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.5	0.58	1
1,4-Dioxane	ND		ug/kg	140	62.	1
p-Diethylbenzene	ND		ug/kg	3.5	0.31	1
p-Ethyltoluene	ND		ug/kg	3.5	0.67	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.5	0.33	1
Ethyl ether	ND		ug/kg	3.5	0.60	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.8	2.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	99		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
 Client ID: RB24_8-10
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 08:36
 Analyst: JC
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.6	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.92	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.92	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.92	0.12	1
Dibromochloromethane	ND		ug/kg	0.92	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.92	0.24	1
Tetrachloroethene	ND		ug/kg	0.46	0.18	1
Chlorobenzene	ND		ug/kg	0.46	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.64	1
1,2-Dichloroethane	ND		ug/kg	0.92	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.15	1
Bromodichloromethane	ND		ug/kg	0.46	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.92	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.46	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.46	0.15	1
Bromoform	ND		ug/kg	3.7	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1
Benzene	0.19	J	ug/kg	0.46	0.15	1
Toluene	0.87	J	ug/kg	0.92	0.50	1
Ethylbenzene	ND		ug/kg	0.92	0.13	1
Chloromethane	ND		ug/kg	3.7	0.86	1
Bromomethane	ND		ug/kg	1.8	0.54	1
Vinyl chloride	ND		ug/kg	0.92	0.31	1
Chloroethane	ND		ug/kg	1.8	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.92	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02

Date Collected: 07/10/19 11:55

Client ID: RB24_8-10

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.46	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.52	1
o-Xylene	ND		ug/kg	0.92	0.27	1
Xylenes, Total	ND		ug/kg	0.92	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.92	0.16	1
1,2-Dichloroethene, Total	ND		ug/kg	0.92	0.13	1
Dibromomethane	ND		ug/kg	1.8	0.22	1
Styrene	ND		ug/kg	0.92	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.2	0.84	1
Acetone	18		ug/kg	9.2	4.4	1
Carbon disulfide	ND		ug/kg	9.2	4.2	1
2-Butanone	ND		ug/kg	9.2	2.0	1
Vinyl acetate	ND		ug/kg	9.2	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.2	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.12	1
2-Hexanone	ND		ug/kg	9.2	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.19	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.92	0.26	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.46	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.92	0.15	1
sec-Butylbenzene	ND		ug/kg	0.92	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
o-Chlorotoluene	ND		ug/kg	1.8	0.18	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.92	1
Hexachlorobutadiene	ND		ug/kg	3.7	0.16	1
Isopropylbenzene	ND		ug/kg	0.92	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.92	0.10	1
Naphthalene	ND		ug/kg	3.7	0.60	1
Acrylonitrile	ND		ug/kg	3.7	1.0	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
Client ID: RB24_8-10
Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.92	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.31	1
1,4-Dioxane	ND		ug/kg	74	32.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.35	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.18	1
Ethyl ether	ND		ug/kg	1.8	0.31	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.6	1.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	101		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
 Client ID: RB24_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 09:03
 Analyst: JC
 Percent Solids: 66%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.4	3.4	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.22	1
Chloroform	ND		ug/kg	2.2	0.21	1
Carbon tetrachloride	ND		ug/kg	1.5	0.34	1
1,2-Dichloropropane	ND		ug/kg	1.5	0.19	1
Dibromochloromethane	ND		ug/kg	1.5	0.21	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.40	1
Tetrachloroethene	ND		ug/kg	0.74	0.29	1
Chlorobenzene	ND		ug/kg	0.74	0.19	1
Trichlorofluoromethane	ND		ug/kg	6.0	1.0	1
1,2-Dichloroethane	ND		ug/kg	1.5	0.38	1
1,1,1-Trichloroethane	ND		ug/kg	0.74	0.25	1
Bromodichloromethane	ND		ug/kg	0.74	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.5	0.41	1
cis-1,3-Dichloropropene	ND		ug/kg	0.74	0.24	1
1,3-Dichloropropene, Total	ND		ug/kg	0.74	0.24	1
1,1-Dichloropropene	ND		ug/kg	0.74	0.24	1
Bromoform	ND		ug/kg	6.0	0.37	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.74	0.25	1
Benzene	ND		ug/kg	0.74	0.25	1
Toluene	ND		ug/kg	1.5	0.81	1
Ethylbenzene	ND		ug/kg	1.5	0.21	1
Chloromethane	ND		ug/kg	6.0	1.4	1
Bromomethane	ND		ug/kg	3.0	0.87	1
Vinyl chloride	ND		ug/kg	1.5	0.50	1
Chloroethane	ND		ug/kg	3.0	0.67	1
1,1-Dichloroethene	ND		ug/kg	1.5	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
Client ID: RB24_13-15
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.74	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	3.0	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	3.0	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	3.0	0.25	1
Methyl tert butyl ether	ND		ug/kg	3.0	0.30	1
p/m-Xylene	ND		ug/kg	3.0	0.83	1
o-Xylene	ND		ug/kg	1.5	0.43	1
Xylenes, Total	ND		ug/kg	1.5	0.43	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	0.26	1
1,2-Dichloroethene, Total	ND		ug/kg	1.5	0.20	1
Dibromomethane	ND		ug/kg	3.0	0.35	1
Styrene	ND		ug/kg	1.5	0.29	1
Dichlorodifluoromethane	ND		ug/kg	15	1.4	1
Acetone	27		ug/kg	15	7.2	1
Carbon disulfide	ND		ug/kg	15	6.8	1
2-Butanone	ND		ug/kg	15	3.3	1
Vinyl acetate	ND		ug/kg	15	3.2	1
4-Methyl-2-pentanone	ND		ug/kg	15	1.9	1
1,2,3-Trichloropropane	ND		ug/kg	3.0	0.19	1
2-Hexanone	ND		ug/kg	15	1.8	1
Bromochloromethane	ND		ug/kg	3.0	0.30	1
2,2-Dichloropropane	ND		ug/kg	3.0	0.30	1
1,2-Dibromoethane	ND		ug/kg	1.5	0.42	1
1,3-Dichloropropane	ND		ug/kg	3.0	0.25	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.74	0.20	1
Bromobenzene	ND		ug/kg	3.0	0.22	1
n-Butylbenzene	ND		ug/kg	1.5	0.25	1
sec-Butylbenzene	ND		ug/kg	1.5	0.22	1
tert-Butylbenzene	ND		ug/kg	3.0	0.18	1
o-Chlorotoluene	ND		ug/kg	3.0	0.28	1
p-Chlorotoluene	ND		ug/kg	3.0	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	1.5	1
Hexachlorobutadiene	ND		ug/kg	6.0	0.25	1
Isopropylbenzene	ND		ug/kg	1.5	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.5	0.16	1
Naphthalene	ND		ug/kg	6.0	0.97	1
Acrylonitrile	ND		ug/kg	6.0	1.7	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
Client ID: RB24_13-15
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.5	0.25	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.0	0.48	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.0	0.40	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.0	0.29	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.0	0.50	1
1,4-Dioxane	ND		ug/kg	120	52.	1
p-Diethylbenzene	ND		ug/kg	3.0	0.26	1
p-Ethyltoluene	ND		ug/kg	3.0	0.57	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.0	0.28	1
Ethyl ether	ND		ug/kg	3.0	0.51	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.4	2.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	100		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
 Client ID: RB26_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 09:29
 Analyst: JC
 Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.0	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.24	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.84	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.60	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	ND		ug/kg	0.60	0.20	1
Toluene	ND		ug/kg	1.2	0.66	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.70	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.55	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
Client ID: RB26_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.68	1
o-Xylene	ND		ug/kg	1.2	0.35	1
Xylenes, Total	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	14		ug/kg	12	5.8	1
Carbon disulfide	ND		ug/kg	12	5.5	1
2-Butanone	ND		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.60	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.8	0.79	1
Acrylonitrile	ND		ug/kg	4.8	1.4	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
Client ID: RB26_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.40	1
1,4-Dioxane	ND		ug/kg	97	42.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.46	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.41	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	116		70-130
Dibromofluoromethane	62	Q	70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
 Client ID: RB26_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 09:56
 Analyst: JC
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.4	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.88	0.13	1
Chloroform	ND		ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.88	0.20	1
1,2-Dichloropropane	ND		ug/kg	0.88	0.11	1
Dibromochloromethane	ND		ug/kg	0.88	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.88	0.23	1
Tetrachloroethene	ND		ug/kg	0.44	0.17	1
Chlorobenzene	ND		ug/kg	0.44	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.5	0.61	1
1,2-Dichloroethane	ND		ug/kg	0.88	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.44	0.15	1
Bromodichloromethane	ND		ug/kg	0.44	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.88	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.44	0.14	1
1,3-Dichloropropene, Total	ND		ug/kg	0.44	0.14	1
1,1-Dichloropropene	ND		ug/kg	0.44	0.14	1
Bromoform	ND		ug/kg	3.5	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.44	0.14	1
Benzene	0.14	J	ug/kg	0.44	0.14	1
Toluene	0.62	J	ug/kg	0.88	0.48	1
Ethylbenzene	ND		ug/kg	0.88	0.12	1
Chloromethane	ND		ug/kg	3.5	0.82	1
Bromomethane	ND		ug/kg	1.8	0.51	1
Vinyl chloride	ND		ug/kg	0.88	0.29	1
Chloroethane	ND		ug/kg	1.8	0.40	1
1,1-Dichloroethene	ND		ug/kg	0.88	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
Client ID: RB26_10-12
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.44	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.49	1
o-Xylene	ND		ug/kg	0.88	0.26	1
Xylenes, Total	ND		ug/kg	0.88	0.26	1
cis-1,2-Dichloroethene	ND		ug/kg	0.88	0.15	1
1,2-Dichloroethene, Total	ND		ug/kg	0.88	0.12	1
Dibromomethane	ND		ug/kg	1.8	0.21	1
Styrene	ND		ug/kg	0.88	0.17	1
Dichlorodifluoromethane	ND		ug/kg	8.8	0.80	1
Acetone	4.9	J	ug/kg	8.8	4.2	1
Carbon disulfide	ND		ug/kg	8.8	4.0	1
2-Butanone	ND		ug/kg	8.8	2.0	1
Vinyl acetate	ND		ug/kg	8.8	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	8.8	1.1	1
1,2,3-Trichloropropane	ND		ug/kg	1.8	0.11	1
2-Hexanone	ND		ug/kg	8.8	1.0	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
2,2-Dichloropropane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.88	0.24	1
1,3-Dichloropropane	ND		ug/kg	1.8	0.15	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.44	0.12	1
Bromobenzene	ND		ug/kg	1.8	0.13	1
n-Butylbenzene	ND		ug/kg	0.88	0.15	1
sec-Butylbenzene	ND		ug/kg	0.88	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.10	1
o-Chlorotoluene	ND		ug/kg	1.8	0.17	1
p-Chlorotoluene	ND		ug/kg	1.8	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	0.88	1
Hexachlorobutadiene	ND		ug/kg	3.5	0.15	1
Isopropylbenzene	ND		ug/kg	0.88	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.88	0.10	1
Naphthalene	ND		ug/kg	3.5	0.57	1
Acrylonitrile	ND		ug/kg	3.5	1.0	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
Client ID: RB26_10-12
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	0.88	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.28	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.29	1
1,4-Dioxane	ND		ug/kg	70	31.	1
p-Diethylbenzene	ND		ug/kg	1.8	0.16	1
p-Ethyltoluene	ND		ug/kg	1.8	0.34	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.8	0.17	1
Ethyl ether	ND		ug/kg	1.8	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.4	1.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	100		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
 Client ID: RB26_14-16
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 10:23
 Analyst: JC
 Percent Solids: 60%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.3	3.8	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.24	1
Chloroform	ND		ug/kg	2.5	0.23	1
Carbon tetrachloride	ND		ug/kg	1.7	0.38	1
1,2-Dichloropropane	ND		ug/kg	1.7	0.21	1
Dibromochloromethane	ND		ug/kg	1.7	0.23	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.44	1
Tetrachloroethene	ND		ug/kg	0.83	0.33	1
Chlorobenzene	ND		ug/kg	0.83	0.21	1
Trichlorofluoromethane	ND		ug/kg	6.7	1.2	1
1,2-Dichloroethane	ND		ug/kg	1.7	0.43	1
1,1,1-Trichloroethane	ND		ug/kg	0.83	0.28	1
Bromodichloromethane	ND		ug/kg	0.83	0.18	1
trans-1,3-Dichloropropene	ND		ug/kg	1.7	0.45	1
cis-1,3-Dichloropropene	ND		ug/kg	0.83	0.26	1
1,3-Dichloropropene, Total	ND		ug/kg	0.83	0.26	1
1,1-Dichloropropene	ND		ug/kg	0.83	0.26	1
Bromoform	ND		ug/kg	6.7	0.41	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.83	0.28	1
Benzene	ND		ug/kg	0.83	0.28	1
Toluene	ND		ug/kg	1.7	0.90	1
Ethylbenzene	ND		ug/kg	1.7	0.23	1
Chloromethane	ND		ug/kg	6.7	1.6	1
Bromomethane	ND		ug/kg	3.3	0.97	1
Vinyl chloride	ND		ug/kg	1.7	0.56	1
Chloroethane	ND		ug/kg	3.3	0.75	1
1,1-Dichloroethene	ND		ug/kg	1.7	0.40	1
trans-1,2-Dichloroethene	ND		ug/kg	2.5	0.23	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
Client ID: RB26_14-16
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.83	0.23	1
1,2-Dichlorobenzene	ND		ug/kg	3.3	0.24	1
1,3-Dichlorobenzene	ND		ug/kg	3.3	0.25	1
1,4-Dichlorobenzene	ND		ug/kg	3.3	0.28	1
Methyl tert butyl ether	ND		ug/kg	3.3	0.33	1
p/m-Xylene	ND		ug/kg	3.3	0.93	1
o-Xylene	ND		ug/kg	1.7	0.48	1
Xylenes, Total	ND		ug/kg	1.7	0.48	1
cis-1,2-Dichloroethene	ND		ug/kg	1.7	0.29	1
1,2-Dichloroethene, Total	ND		ug/kg	1.7	0.23	1
Dibromomethane	ND		ug/kg	3.3	0.40	1
Styrene	ND		ug/kg	1.7	0.33	1
Dichlorodifluoromethane	ND		ug/kg	17	1.5	1
Acetone	150		ug/kg	17	8.0	1
Carbon disulfide	11	J	ug/kg	17	7.6	1
2-Butanone	8.4	J	ug/kg	17	3.7	1
Vinyl acetate	ND		ug/kg	17	3.6	1
4-Methyl-2-pentanone	ND		ug/kg	17	2.1	1
1,2,3-Trichloropropane	ND		ug/kg	3.3	0.21	1
2-Hexanone	ND		ug/kg	17	2.0	1
Bromochloromethane	ND		ug/kg	3.3	0.34	1
2,2-Dichloropropane	ND		ug/kg	3.3	0.34	1
1,2-Dibromoethane	ND		ug/kg	1.7	0.46	1
1,3-Dichloropropane	ND		ug/kg	3.3	0.28	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.83	0.22	1
Bromobenzene	ND		ug/kg	3.3	0.24	1
n-Butylbenzene	ND		ug/kg	1.7	0.28	1
sec-Butylbenzene	ND		ug/kg	1.7	0.24	1
tert-Butylbenzene	ND		ug/kg	3.3	0.20	1
o-Chlorotoluene	ND		ug/kg	3.3	0.32	1
p-Chlorotoluene	ND		ug/kg	3.3	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	1.7	1
Hexachlorobutadiene	ND		ug/kg	6.7	0.28	1
Isopropylbenzene	ND		ug/kg	1.7	0.18	1
p-Isopropyltoluene	ND		ug/kg	1.7	0.18	1
Naphthalene	ND		ug/kg	6.7	1.1	1
Acrylonitrile	ND		ug/kg	6.7	1.9	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
Client ID: RB26_14-16
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.7	0.28	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.3	0.54	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.3	0.45	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.3	0.32	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.3	0.56	1
1,4-Dioxane	ND		ug/kg	130	58.	1
p-Diethylbenzene	ND		ug/kg	3.3	0.29	1
p-Ethyltoluene	ND		ug/kg	3.3	0.64	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.3	0.32	1
Ethyl ether	ND		ug/kg	3.3	0.57	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.3	2.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	100		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
 Client ID: RB23_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 10:50
 Analyst: JC
 Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.3	3.8	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.24	1
Chloroform	ND		ug/kg	2.5	0.23	1
Carbon tetrachloride	ND		ug/kg	1.6	0.38	1
1,2-Dichloropropane	ND		ug/kg	1.6	0.21	1
Dibromochloromethane	ND		ug/kg	1.6	0.23	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.44	1
Tetrachloroethene	24		ug/kg	0.83	0.32	1
Chlorobenzene	ND		ug/kg	0.83	0.21	1
Trichlorofluoromethane	ND		ug/kg	6.6	1.1	1
1,2-Dichloroethane	ND		ug/kg	1.6	0.42	1
1,1,1-Trichloroethane	ND		ug/kg	0.83	0.28	1
Bromodichloromethane	ND		ug/kg	0.83	0.18	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	0.45	1
cis-1,3-Dichloropropene	ND		ug/kg	0.83	0.26	1
1,3-Dichloropropene, Total	ND		ug/kg	0.83	0.26	1
1,1-Dichloropropene	ND		ug/kg	0.83	0.26	1
Bromoform	ND		ug/kg	6.6	0.41	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.83	0.27	1
Benzene	ND		ug/kg	0.83	0.27	1
Toluene	ND		ug/kg	1.6	0.90	1
Ethylbenzene	ND		ug/kg	1.6	0.23	1
Chloromethane	ND		ug/kg	6.6	1.5	1
Bromomethane	ND		ug/kg	3.3	0.96	1
Vinyl chloride	ND		ug/kg	1.6	0.55	1
Chloroethane	ND		ug/kg	3.3	0.75	1
1,1-Dichloroethene	ND		ug/kg	1.6	0.39	1
trans-1,2-Dichloroethene	ND		ug/kg	2.5	0.23	1

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07

Date Collected: 07/10/19 13:55

Client ID: RB23_0-2

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.83	0.23	1
1,2-Dichlorobenzene	ND		ug/kg	3.3	0.24	1
1,3-Dichlorobenzene	ND		ug/kg	3.3	0.24	1
1,4-Dichlorobenzene	ND		ug/kg	3.3	0.28	1
Methyl tert butyl ether	ND		ug/kg	3.3	0.33	1
p/m-Xylene	ND		ug/kg	3.3	0.93	1
o-Xylene	ND		ug/kg	1.6	0.48	1
Xylenes, Total	ND		ug/kg	1.6	0.48	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	0.29	1
1,2-Dichloroethene, Total	ND		ug/kg	1.6	0.23	1
Dibromomethane	ND		ug/kg	3.3	0.39	1
Styrene	ND		ug/kg	1.6	0.32	1
Dichlorodifluoromethane	ND		ug/kg	16	1.5	1
Acetone	28		ug/kg	16	8.0	1
Carbon disulfide	ND		ug/kg	16	7.5	1
2-Butanone	ND		ug/kg	16	3.7	1
Vinyl acetate	ND		ug/kg	16	3.6	1
4-Methyl-2-pentanone	ND		ug/kg	16	2.1	1
1,2,3-Trichloropropane	ND		ug/kg	3.3	0.21	1
2-Hexanone	ND		ug/kg	16	2.0	1
Bromochloromethane	ND		ug/kg	3.3	0.34	1
2,2-Dichloropropane	ND		ug/kg	3.3	0.33	1
1,2-Dibromoethane	ND		ug/kg	1.6	0.46	1
1,3-Dichloropropane	ND		ug/kg	3.3	0.28	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.83	0.22	1
Bromobenzene	ND		ug/kg	3.3	0.24	1
n-Butylbenzene	ND		ug/kg	1.6	0.28	1
sec-Butylbenzene	ND		ug/kg	1.6	0.24	1
tert-Butylbenzene	ND		ug/kg	3.3	0.20	1
o-Chlorotoluene	ND		ug/kg	3.3	0.32	1
p-Chlorotoluene	ND		ug/kg	3.3	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	1.6	1
Hexachlorobutadiene	ND		ug/kg	6.6	0.28	1
Isopropylbenzene	ND		ug/kg	1.6	0.18	1
p-Isopropyltoluene	ND		ug/kg	1.6	0.18	1
Naphthalene	ND		ug/kg	6.6	1.1	1
Acrylonitrile	ND		ug/kg	6.6	1.9	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
Client ID: RB23_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.6	0.28	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.3	0.53	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.3	0.45	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.3	0.32	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.3	0.55	1
1,4-Dioxane	ND		ug/kg	130	58.	1
p-Diethylbenzene	ND		ug/kg	3.3	0.29	1
p-Ethyltoluene	ND		ug/kg	3.3	0.64	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	3.3	0.32	1
Ethyl ether	ND		ug/kg	3.3	0.56	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.3	2.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	68	Q	70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 11:17
 Analyst: JC
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.79	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.57	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	0.66	J	ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.3	0.66	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
Client ID: RB23_10-12
Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	0.34	J	ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	15		ug/kg	11	5.4	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.3	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.57	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.3	0.13	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.5	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.5	0.74	1
Acrylonitrile	ND		ug/kg	4.5	1.3	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
Client ID: RB23_10-12
Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	90	40.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.43	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.7	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	97		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
 Client ID: RB23_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 11:44
 Analyst: JC
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	21		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.1	0.72	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.17	1
Bromodichloromethane	ND		ug/kg	0.52	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.52	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.52	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.52	0.16	1
Bromoform	ND		ug/kg	4.1	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.52	0.17	1
Benzene	0.18	J	ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.56	1
Ethylbenzene	0.16	J	ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.1	0.96	1
Bromomethane	ND		ug/kg	2.1	0.60	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.1	0.47	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
Client ID: RB23_13-15
Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatiles Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.58	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.1	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.94	1
Acetone	14		ug/kg	10	5.0	1
Carbon disulfide	ND		ug/kg	10	4.7	1
2-Butanone	ND		ug/kg	10	2.3	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.1	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.1	0.21	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,3-Dichloropropane	ND		ug/kg	2.1	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.52	0.14	1
Bromobenzene	ND		ug/kg	2.1	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
o-Chlorotoluene	ND		ug/kg	2.1	0.20	1
p-Chlorotoluene	ND		ug/kg	2.1	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.1	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.1	0.67	1
Acrylonitrile	ND		ug/kg	4.1	1.2	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
Client ID: RB23_13-15
Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.33	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.34	1
1,4-Dioxane	ND		ug/kg	83	36.	1
p-Diethylbenzene	ND		ug/kg	2.1	0.18	1
p-Ethyltoluene	ND		ug/kg	2.1	0.40	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.1	0.20	1
Ethyl ether	ND		ug/kg	2.1	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.2	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	97		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-11
 Client ID: SOTB06_071019
 Sample Location: BRONX, NY

Date Collected: 07/10/19 00:00
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 07/11/19 10:34
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-11
Client ID: SOTB06_071019
Sample Location: BRONX, NY

Date Collected: 07/10/19 00:00
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-11
Client ID: SOTB06_071019
Sample Location: BRONX, NY

Date Collected: 07/10/19 00:00
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	93		70-130

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/11/19 08:43
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1258652-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/11/19 08:43
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1258652-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/11/19 08:43
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1258652-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	96		70-130



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/11/19 07:43
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-09 Batch: WG1258702-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/11/19 07:43
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-09 Batch: WG1258702-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/11/19 07:43
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-09 Batch: WG1258702-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1258652-3 WG1258652-4								
Methylene chloride	90		90		70-130	0		20
1,1-Dichloroethane	87		86		70-130	1		20
Chloroform	84		85		70-130	1		20
Carbon tetrachloride	90		91		63-132	1		20
1,2-Dichloropropane	90		89		70-130	1		20
Dibromochloromethane	98		94		63-130	4		20
1,1,2-Trichloroethane	100		99		70-130	1		20
Tetrachloroethene	98		97		70-130	1		20
Chlorobenzene	98		97		75-130	1		20
Trichlorofluoromethane	71		71		62-150	0		20
1,2-Dichloroethane	82		81		70-130	1		20
1,1,1-Trichloroethane	85		86		67-130	1		20
Bromodichloromethane	85		85		67-130	0		20
trans-1,3-Dichloropropene	99		95		70-130	4		20
cis-1,3-Dichloropropene	96		94		70-130	2		20
1,1-Dichloropropene	86		85		70-130	1		20
Bromoform	92		90		54-136	2		20
1,1,1,2-Tetrachloroethane	97		97		67-130	0		20
Benzene	87		88		70-130	1		20
Toluene	97		95		70-130	2		20
Ethylbenzene	97		96		70-130	1		20
Chloromethane	66		59	Q	64-130	11		20
Bromomethane	42		38	Q	39-139	10		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1258652-3 WG1258652-4								
Vinyl chloride	78		77		55-140	1		20
Chloroethane	88		85		55-138	3		20
1,1-Dichloroethene	83		82		61-145	1		20
trans-1,2-Dichloroethene	86		87		70-130	1		20
Trichloroethene	88		86		70-130	2		20
1,2-Dichlorobenzene	98		98		70-130	0		20
1,3-Dichlorobenzene	96		97		70-130	1		20
1,4-Dichlorobenzene	96		97		70-130	1		20
Methyl tert butyl ether	91		88		63-130	3		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	91		90		70-130	1		20
Dibromomethane	90		86		70-130	5		20
1,2,3-Trichloropropane	95		93		64-130	2		20
Acrylonitrile	90		87		70-130	3		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	62		62		36-147	0		20
Acetone	80		76		58-148	5		20
Carbon disulfide	81		82		51-130	1		20
2-Butanone	96		92		63-138	4		20
Vinyl acetate	90		91		70-130	1		20
4-Methyl-2-pentanone	96		92		59-130	4		20
2-Hexanone	96		93		57-130	3		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1258652-3 WG1258652-4								
Bromochloromethane	97		95		70-130	2		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	98		96		70-130	2		20
1,3-Dichloropropane	98		95		70-130	3		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	96		94		70-130	2		20
n-Butylbenzene	94		95		53-136	1		20
sec-Butylbenzene	94		96		70-130	2		20
tert-Butylbenzene	94		94		70-130	0		20
o-Chlorotoluene	92		91		70-130	1		20
p-Chlorotoluene	92		93		70-130	1		20
1,2-Dibromo-3-chloropropane	96		93		41-144	3		20
Hexachlorobutadiene	98		100		63-130	2		20
Isopropylbenzene	95		96		70-130	1		20
p-Isopropyltoluene	97		98		70-130	1		20
Naphthalene	97		100		70-130	3		20
n-Propylbenzene	95		96		69-130	1		20
1,2,3-Trichlorobenzene	94		100		70-130	6		20
1,2,4-Trichlorobenzene	99		100		70-130	1		20
1,3,5-Trimethylbenzene	93		94		64-130	1		20
1,2,4-Trimethylbenzene	94		95		70-130	1		20
1,4-Dioxane	100		100		56-162	0		20
p-Diethylbenzene	97		99		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930096

Report Date: 07/29/19

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1258652-3 WG1258652-4								
p-Ethyltoluene	96		97		70-130	1		20
1,2,4,5-Tetramethylbenzene	97		98		70-130	1		20
Ethyl ether	92		89		59-134	3		20
trans-1,4-Dichloro-2-butene	84		78		70-130	7		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	93		91		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	93		92		70-130
Dibromofluoromethane	94		95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-09 Batch: WG1258702-3 WG1258702-4								
Methylene chloride	89		88		70-130	1		30
1,1-Dichloroethane	104		106		70-130	2		30
Chloroform	97		98		70-130	1		30
Carbon tetrachloride	84		84		70-130	0		30
1,2-Dichloropropane	105		105		70-130	0		30
Dibromochloromethane	85		90		70-130	6		30
1,1,2-Trichloroethane	98		100		70-130	2		30
Tetrachloroethene	86		88		70-130	2		30
Chlorobenzene	94		96		70-130	2		30
Trichlorofluoromethane	96		97		70-139	1		30
1,2-Dichloroethane	105		105		70-130	0		30
1,1,1-Trichloroethane	93		92		70-130	1		30
Bromodichloromethane	90		91		70-130	1		30
trans-1,3-Dichloropropene	92		94		70-130	2		30
cis-1,3-Dichloropropene	92		93		70-130	1		30
1,1-Dichloropropene	96		100		70-130	4		30
Bromoform	76		78		70-130	3		30
1,1,1,2-Tetrachloroethane	104		106		70-130	2		30
Benzene	95		96		70-130	1		30
Toluene	97		99		70-130	2		30
Ethylbenzene	98		101		70-130	3		30
Chloromethane	124		121		52-130	2		30
Bromomethane	148	Q	142		57-147	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-09 Batch: WG1258702-3 WG1258702-4								
Vinyl chloride	115		116		67-130	1		30
Chloroethane	105		104		50-151	1		30
1,1-Dichloroethene	90		93		65-135	3		30
trans-1,2-Dichloroethene	91		91		70-130	0		30
Trichloroethene	88		90		70-130	2		30
1,2-Dichlorobenzene	94		98		70-130	4		30
1,3-Dichlorobenzene	93		96		70-130	3		30
1,4-Dichlorobenzene	91		94		70-130	3		30
Methyl tert butyl ether	94		93		66-130	1		30
p/m-Xylene	93		95		70-130	2		30
o-Xylene	92		95		70-130	3		30
cis-1,2-Dichloroethene	92		92		70-130	0		30
Dibromomethane	96		96		70-130	0		30
Styrene	91		94		70-130	3		30
Dichlorodifluoromethane	87		88		30-146	1		30
Acetone	121		108		54-140	11		30
Carbon disulfide	94		94		59-130	0		30
2-Butanone	103		90		70-130	13		30
Vinyl acetate	103		104		70-130	1		30
4-Methyl-2-pentanone	104		104		70-130	0		30
1,2,3-Trichloropropane	106		107		68-130	1		30
2-Hexanone	112		107		70-130	5		30
Bromochloromethane	90		90		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-09 Batch: WG1258702-3 WG1258702-4								
2,2-Dichloropropane	89		88		70-130	1		30
1,2-Dibromoethane	94		98		70-130	4		30
1,3-Dichloropropane	103		106		69-130	3		30
1,1,1,2-Tetrachloroethane	85		87		70-130	2		30
Bromobenzene	91		94		70-130	3		30
n-Butylbenzene	102		106		70-130	4		30
sec-Butylbenzene	99		102		70-130	3		30
tert-Butylbenzene	96		100		70-130	4		30
o-Chlorotoluene	103		105		70-130	2		30
p-Chlorotoluene	101		103		70-130	2		30
1,2-Dibromo-3-chloropropane	82		83		68-130	1		30
Hexachlorobutadiene	80		84		67-130	5		30
Isopropylbenzene	99		102		70-130	3		30
p-Isopropyltoluene	96		99		70-130	3		30
Naphthalene	95		95		70-130	0		30
Acrylonitrile	103		103		70-130	0		30
n-Propylbenzene	101		104		70-130	3		30
1,2,3-Trichlorobenzene	88		90		70-130	2		30
1,2,4-Trichlorobenzene	86		88		70-130	2		30
1,3,5-Trimethylbenzene	98		102		70-130	4		30
1,2,4-Trimethylbenzene	97		100		70-130	3		30
1,4-Dioxane	118		111		65-136	6		30
p-Diethylbenzene	94		97		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930096

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-09 Batch: WG1258702-3 WG1258702-4								
p-Ethyltoluene	99		102		70-130	3		30
1,2,4,5-Tetramethylbenzene	93		96		70-130	3		30
Ethyl ether	97		96		67-130	1		30
trans-1,4-Dichloro-2-butene	101		104		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	113		111		70-130
Toluene-d8	103		105		70-130
4-Bromofluorobenzene	106		105		70-130
Dibromofluoromethane	98		98		70-130

SEMIVOLATILES

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
 Client ID: RB24_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/11/19 19:28
 Analyst: JG
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	120		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	25	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
 Client ID: RB24_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	62	J	ug/kg	110	21.	1
Benzo(a)pyrene	48	J	ug/kg	150	45.	1
Benzo(b)fluoranthene	80	J	ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	68	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	50	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	62	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	45	J	ug/kg	150	26.	1
Pyrene	100	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
 Client ID: RB24_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	ND		ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	28	8.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		25-120
Phenol-d6	60		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	66		10-136
4-Terphenyl-d14	70		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
 Client ID: RB24_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 19:04
 Analyst: JW
 Percent Solids: 90%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.09	0.025	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.09	0.050	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.09	0.043	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.09	0.057	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.09	0.049	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.09	0.066	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.09	0.046	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.09	0.196	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.09	0.149	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.09	0.082	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.09	0.142	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.09	0.073	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.09	0.314	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.09	0.220	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.09	0.051	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.09	0.167	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.09	0.107	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.09	0.092	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.09	0.077	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.09	0.224	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.09	0.059	1
PFOA/PFOS, Total	ND		ug/kg	1.09	0.046	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
 Client ID: RB24_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	96		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	88		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	88		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	99		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	70		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	87		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	87		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	82		26-160

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
 Client ID: RB24_8-10
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/11/19 19:52
 Analyst: JG
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	17.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	240		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	240		ug/kg	180	61.	1
Butyl benzyl phthalate	200		ug/kg	180	44.	1
Di-n-butylphthalate	35	J	ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
 Client ID: RB24_8-10
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	110		ug/kg	100	20.	1
Benzo(a)pyrene	58	J	ug/kg	140	43.	1
Benzo(b)fluoranthene	100		ug/kg	100	30.	1
Benzo(k)fluoranthene	40	J	ug/kg	100	28.	1
Chrysene	110		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	41	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	130		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	45	J	ug/kg	140	24.	1
Pyrene	180		ug/kg	100	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	840	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	84.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	28.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
Client ID: RB24_8-10
Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	43	J	ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	45		10-136
4-Terphenyl-d14	69		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
Client ID: RB24_8-10
Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 19:20
Analyst: JW
Percent Solids: 94%

Extraction Method: EPA 537(M)
Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.922	0.021	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.922	0.042	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.922	0.036	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	0.922	0.048	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.922	0.042	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.922	0.056	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	0.922	0.039	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.922	0.166	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.922	0.126	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.922	0.069	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.922	0.120	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.922	0.062	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.922	0.265	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.922	0.186	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.922	0.043	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.922	0.141	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.922	0.090	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.922	0.078	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.922	0.065	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.922	0.188	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.922	0.050	1
PFOA/PFOS, Total	ND		ug/kg	0.922	0.039	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
 Client ID: RB24_8-10
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	81		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	81		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	82		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	86		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	82		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	67		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	82		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	86		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	52		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	52		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79		26-160

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
 Client ID: RB24_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/11/19 20:17
 Analyst: JG
 Percent Solids: 66%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	200	26.	1
1,2,4-Trichlorobenzene	ND		ug/kg	250	29.	1
Hexachlorobenzene	ND		ug/kg	150	28.	1
Bis(2-chloroethyl)ether	ND		ug/kg	230	34.	1
2-Chloronaphthalene	ND		ug/kg	250	25.	1
1,2-Dichlorobenzene	ND		ug/kg	250	45.	1
1,3-Dichlorobenzene	ND		ug/kg	250	43.	1
1,4-Dichlorobenzene	ND		ug/kg	250	44.	1
3,3'-Dichlorobenzidine	ND		ug/kg	250	67.	1
2,4-Dinitrotoluene	ND		ug/kg	250	50.	1
2,6-Dinitrotoluene	ND		ug/kg	250	43.	1
Fluoranthene	ND		ug/kg	150	29.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	250	27.	1
4-Bromophenyl phenyl ether	ND		ug/kg	250	38.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	300	43.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	270	25.	1
Hexachlorobutadiene	ND		ug/kg	250	37.	1
Hexachlorocyclopentadiene	ND		ug/kg	720	230	1
Hexachloroethane	ND		ug/kg	200	41.	1
Isophorone	ND		ug/kg	230	33.	1
Naphthalene	ND		ug/kg	250	31.	1
Nitrobenzene	ND		ug/kg	230	37.	1
NDPA/DPA	ND		ug/kg	200	29.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	250	39.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	250	87.	1
Butyl benzyl phthalate	ND		ug/kg	250	63.	1
Di-n-butylphthalate	ND		ug/kg	250	48.	1
Di-n-octylphthalate	ND		ug/kg	250	85.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
Client ID: RB24_13-15
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	250	23.	1
Dimethyl phthalate	ND		ug/kg	250	53.	1
Benzo(a)anthracene	ND		ug/kg	150	28.	1
Benzo(a)pyrene	ND		ug/kg	200	61.	1
Benzo(b)fluoranthene	ND		ug/kg	150	42.	1
Benzo(k)fluoranthene	ND		ug/kg	150	40.	1
Chrysene	ND		ug/kg	150	26.	1
Acenaphthylene	ND		ug/kg	200	39.	1
Anthracene	ND		ug/kg	150	49.	1
Benzo(ghi)perylene	ND		ug/kg	200	30.	1
Fluorene	ND		ug/kg	250	24.	1
Phenanthrene	ND		ug/kg	150	30.	1
Dibenzo(a,h)anthracene	ND		ug/kg	150	29.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	200	35.	1
Pyrene	ND		ug/kg	150	25.	1
Biphenyl	ND		ug/kg	570	58.	1
4-Chloroaniline	ND		ug/kg	250	46.	1
2-Nitroaniline	ND		ug/kg	250	48.	1
3-Nitroaniline	ND		ug/kg	250	47.	1
4-Nitroaniline	ND		ug/kg	250	100	1
Dibenzofuran	ND		ug/kg	250	24.	1
2-Methylnaphthalene	ND		ug/kg	300	30.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	250	26.	1
Acetophenone	ND		ug/kg	250	31.	1
2,4,6-Trichlorophenol	ND		ug/kg	150	48.	1
p-Chloro-m-cresol	ND		ug/kg	250	37.	1
2-Chlorophenol	ND		ug/kg	250	30.	1
2,4-Dichlorophenol	ND		ug/kg	230	40.	1
2,4-Dimethylphenol	ND		ug/kg	250	83.	1
2-Nitrophenol	ND		ug/kg	540	94.	1
4-Nitrophenol	ND		ug/kg	350	100	1
2,4-Dinitrophenol	ND		ug/kg	1200	120	1
4,6-Dinitro-o-cresol	ND		ug/kg	650	120	1
Pentachlorophenol	ND		ug/kg	200	55.	1
Phenol	ND		ug/kg	250	38.	1
2-Methylphenol	ND		ug/kg	250	39.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	360	39.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
Client ID: RB24_13-15
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	250	48.	1
Benzoic Acid	ND		ug/kg	810	250	1
Benzyl Alcohol	ND		ug/kg	250	77.	1
Carbazole	ND		ug/kg	250	24.	1
1,4-Dioxane	ND		ug/kg	38	12.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	64		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	69		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
 Client ID: RB24_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 19:37
 Analyst: JW
 Percent Solids: 66%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.49	0.034	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.49	0.069	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.49	0.058	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.49	0.078	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.49	0.067	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.49	0.090	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.49	0.063	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.49	0.268	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.49	0.204	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.49	0.112	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.49	0.194	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.49	0.100	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.49	0.428	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.49	0.301	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.49	0.070	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.49	0.228	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.49	0.146	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.49	0.126	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.49	0.104	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.49	0.305	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.49	0.081	1
PFOA/PFOS, Total	ND		ug/kg	1.49	0.063	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
 Client ID: RB24_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	80		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	85		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	85		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	79		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	92		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	69		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	3		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	63		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	69		26-160

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
 Client ID: RB26_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/11/19 20:42
 Analyst: JG
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	46	J	ug/kg	140	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	930		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	47	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
 Client ID: RB26_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	440		ug/kg	110	20.	1
Benzo(a)pyrene	410		ug/kg	140	44.	1
Benzo(b)fluoranthene	530		ug/kg	110	31.	1
Benzo(k)fluoranthene	160		ug/kg	110	29.	1
Chrysene	430		ug/kg	110	19.	1
Acenaphthylene	39	J	ug/kg	140	28.	1
Anthracene	110		ug/kg	110	35.	1
Benzo(ghi)perylene	270		ug/kg	140	21.	1
Fluorene	45	J	ug/kg	180	18.	1
Phenanthrene	610		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	61	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	270		ug/kg	140	25.	1
Pyrene	840		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	45	J	ug/kg	180	17.	1
2-Methylnaphthalene	27	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
 Client ID: RB26_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	590	180	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	67	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	27	8.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		25-120
Phenol-d6	62		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	67		10-136
4-Terphenyl-d14	55		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
Client ID: RB26_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 19:53
Analyst: JW
Percent Solids: 91%

Extraction Method: EPA 537(M)
Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.947	0.022	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.947	0.044	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.947	0.037	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	0.947	0.050	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.947	0.043	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.947	0.057	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	0.947	0.040	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.947	0.170	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.947	0.129	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.947	0.071	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.947	0.123	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.947	0.064	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.947	0.272	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.947	0.191	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.947	0.044	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.947	0.145	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.947	0.093	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.947	0.080	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.947	0.066	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.947	0.194	1
Perfluorotetradecanoic Acid (PFTTA)	ND		ug/kg	0.947	0.051	1
PFOA/PFOS, Total	ND		ug/kg	0.947	0.040	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
 Client ID: RB26_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	84		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	90		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	84		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	91		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	77		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	84		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	92		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	62		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	79		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	65		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	80		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	77		26-160

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
 Client ID: RB26_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/11/19 21:06
 Analyst: JG
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	44	J	ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
Client ID: RB26_10-12
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	40	J	ug/kg	110	20.	1
Benzo(a)pyrene	50	J	ug/kg	140	43.	1
Benzo(b)fluoranthene	49	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	35	J	ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	46	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	36	J	ug/kg	140	25.	1
Pyrene	53	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	380	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
Client ID: RB26_10-12
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		25-120
Phenol-d6	60		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	67		10-136
4-Terphenyl-d14	58		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
 Client ID: RB26_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 20:10
 Analyst: JW
 Percent Solids: 93%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.942	0.021	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.942	0.043	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.942	0.037	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	0.942	0.050	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.942	0.043	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.942	0.057	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	0.942	0.040	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.942	0.169	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.942	0.129	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.942	0.071	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.942	0.122	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.942	0.063	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.942	0.270	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.942	0.190	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.942	0.044	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.942	0.144	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.942	0.092	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.942	0.080	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.942	0.066	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.942	0.193	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.942	0.051	1
PFOA/PFOS, Total	ND		ug/kg	0.942	0.040	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
 Client ID: RB26_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	84		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	84		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	84		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	87		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	70		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	90		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	51		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	87		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	83		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	55		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79		26-160

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
 Client ID: RB26_14-16
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/11/19 21:30
 Analyst: JG
 Percent Solids: 60%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	220	28.	1
1,2,4-Trichlorobenzene	ND		ug/kg	270	31.	1
Hexachlorobenzene	ND		ug/kg	160	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	250	37.	1
2-Chloronaphthalene	ND		ug/kg	270	27.	1
1,2-Dichlorobenzene	ND		ug/kg	270	49.	1
1,3-Dichlorobenzene	ND		ug/kg	270	47.	1
1,4-Dichlorobenzene	ND		ug/kg	270	48.	1
3,3'-Dichlorobenzidine	ND		ug/kg	270	73.	1
2,4-Dinitrotoluene	ND		ug/kg	270	55.	1
2,6-Dinitrotoluene	ND		ug/kg	270	47.	1
Fluoranthene	ND		ug/kg	160	31.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	270	29.	1
4-Bromophenyl phenyl ether	ND		ug/kg	270	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	330	47.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	300	27.	1
Hexachlorobutadiene	ND		ug/kg	270	40.	1
Hexachlorocyclopentadiene	ND		ug/kg	780	250	1
Hexachloroethane	ND		ug/kg	220	44.	1
Isophorone	ND		ug/kg	250	36.	1
Naphthalene	ND		ug/kg	270	33.	1
Nitrobenzene	ND		ug/kg	250	40.	1
NDPA/DPA	ND		ug/kg	220	31.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	270	42.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	270	95.	1
Butyl benzyl phthalate	ND		ug/kg	270	69.	1
Di-n-butylphthalate	ND		ug/kg	270	52.	1
Di-n-octylphthalate	ND		ug/kg	270	93.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
Client ID: RB26_14-16
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	270	25.	1
Dimethyl phthalate	ND		ug/kg	270	58.	1
Benzo(a)anthracene	ND		ug/kg	160	31.	1
Benzo(a)pyrene	ND		ug/kg	220	67.	1
Benzo(b)fluoranthene	ND		ug/kg	160	46.	1
Benzo(k)fluoranthene	ND		ug/kg	160	44.	1
Chrysene	ND		ug/kg	160	28.	1
Acenaphthylene	ND		ug/kg	220	42.	1
Anthracene	ND		ug/kg	160	53.	1
Benzo(ghi)perylene	ND		ug/kg	220	32.	1
Fluorene	ND		ug/kg	270	27.	1
Phenanthrene	ND		ug/kg	160	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	160	32.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	220	38.	1
Pyrene	ND		ug/kg	160	27.	1
Biphenyl	ND		ug/kg	620	64.	1
4-Chloroaniline	ND		ug/kg	270	50.	1
2-Nitroaniline	ND		ug/kg	270	53.	1
3-Nitroaniline	ND		ug/kg	270	52.	1
4-Nitroaniline	ND		ug/kg	270	110	1
Dibenzofuran	ND		ug/kg	270	26.	1
2-Methylnaphthalene	ND		ug/kg	330	33.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	270	29.	1
Acetophenone	ND		ug/kg	270	34.	1
2,4,6-Trichlorophenol	ND		ug/kg	160	52.	1
p-Chloro-m-cresol	ND		ug/kg	270	41.	1
2-Chlorophenol	ND		ug/kg	270	32.	1
2,4-Dichlorophenol	ND		ug/kg	250	44.	1
2,4-Dimethylphenol	ND		ug/kg	270	90.	1
2-Nitrophenol	ND		ug/kg	590	100	1
4-Nitrophenol	ND		ug/kg	380	110	1
2,4-Dinitrophenol	ND		ug/kg	1300	130	1
4,6-Dinitro-o-cresol	ND		ug/kg	710	130	1
Pentachlorophenol	ND		ug/kg	220	60.	1
Phenol	ND		ug/kg	270	41.	1
2-Methylphenol	ND		ug/kg	270	42.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	390	43.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
Client ID: RB26_14-16
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	270	52.	1
Benzoic Acid	ND		ug/kg	890	280	1
Benzyl Alcohol	ND		ug/kg	270	84.	1
Carbazole	ND		ug/kg	270	27.	1
1,4-Dioxane	ND		ug/kg	41	13.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		25-120
Phenol-d6	60		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	63		30-120
2,4,6-Tribromophenol	68		10-136
4-Terphenyl-d14	57		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
Client ID: RB26_14-16
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 122,537(M)
Analytical Date: 07/26/19 20:26
Analyst: JW
Percent Solids: 60%

Extraction Method: EPA 537(M)
Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.57	0.036	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.57	0.072	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.57	0.061	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.57	0.082	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.57	0.071	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.57	0.095	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.57	0.066	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.57	0.282	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.57	0.214	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.57	0.118	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.57	0.204	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.57	0.105	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.57	0.450	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.57	0.316	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.57	0.073	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.57	0.240	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.57	0.154	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.57	0.132	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.57	0.110	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.57	0.321	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.57	0.085	1
PFOA/PFOS, Total	ND		ug/kg	1.57	0.066	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
 Client ID: RB26_14-16
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	80		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	85		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	83		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	80		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	83		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	69		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	88		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	87		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	81		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	87		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	71		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	88		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	38		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	63		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	80		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		26-160

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
 Client ID: RB23_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/11/19 21:55
 Analyst: JG
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	67	J	ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
Client ID: RB23_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	47	J	ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	53	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	51	J	ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	110	34.	1
Benzo(ghi)perylene	33	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	46	J	ug/kg	110	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	30	J	ug/kg	140	25.	1
Pyrene	68	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	28.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
 Client ID: RB23_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		25-120
Phenol-d6	56		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	62		30-120
2,4,6-Tribromophenol	62		10-136
4-Terphenyl-d14	59		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
 Client ID: RB23_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 20:43
 Analyst: JW
 Percent Solids: 93%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.985	0.022	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.985	0.045	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.985	0.038	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	0.985	0.052	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.985	0.044	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.985	0.060	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	0.985	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.985	0.177	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.985	0.134	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.985	0.074	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.985	0.128	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.985	0.066	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.985	0.283	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.985	0.198	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.985	0.046	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.985	0.151	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.985	0.097	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.985	0.083	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.985	0.069	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.985	0.201	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.985	0.053	1
PFOA/PFOS, Total	ND		ug/kg	0.985	0.041	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
 Client ID: RB23_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	94		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	103		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	90		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	87		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	98		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	107		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	105		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	52		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	92		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	8		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	53		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	85		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	80		26-160

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/11/19 22:19
 Analyst: JG
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	32.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	150	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	ND		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	27.	1
Pyrene	ND		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	620	200	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	ND		ug/kg	190	19.	1
1,4-Dioxane	ND		ug/kg	29	8.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		25-120
Phenol-d6	55		10-120
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	59		30-120
2,4,6-Tribromophenol	56		10-136
4-Terphenyl-d14	43		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 20:59
 Analyst: JW
 Percent Solids: 85%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.02	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.02	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.02	0.040	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.02	0.054	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.02	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.02	0.062	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.02	0.043	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.02	0.184	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.02	0.140	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.02	0.077	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.02	0.133	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.02	0.069	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.02	0.294	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.02	0.206	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.02	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.02	0.157	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.02	0.100	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.02	0.087	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.02	0.072	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.02	0.210	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.02	0.055	1
PFOA/PFOS, Total	ND		ug/kg	1.02	0.043	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	90		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	85		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	88		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	85		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	76		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	90		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	92		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	64		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	21		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	62		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	71		26-160

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
 Client ID: RB23_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 07/11/19 22:44
 Analyst: JG
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
 Client ID: RB23_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	ND		ug/kg	120	23.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	ND		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	ND		ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	20.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	ND		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	83.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	76.	1
4-Nitrophenol	ND		ug/kg	280	82.	1
2,4-Dinitrophenol	ND		ug/kg	960	94.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	96.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	31.	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
Client ID: RB23_13-15
Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	650	200	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	ND		ug/kg	200	20.	1
1,4-Dioxane	ND		ug/kg	30	9.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		25-120
Phenol-d6	55		10-120
Nitrobenzene-d5	50		23-120
2-Fluorobiphenyl	57		30-120
2,4,6-Tribromophenol	64		10-136
4-Terphenyl-d14	69		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
 Client ID: RB23_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 21:16
 Analyst: JW
 Percent Solids: 81%

Extraction Method: EPA 537(M)
 Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.06	0.024	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.06	0.049	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.06	0.042	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.06	0.056	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.06	0.048	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.06	0.064	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.06	0.045	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.06	0.191	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.06	0.145	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.06	0.080	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.06	0.138	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.06	0.071	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.06	0.306	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.06	0.215	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.06	0.050	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.06	0.163	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.06	0.104	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.06	0.090	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.06	0.075	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.06	0.218	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.06	0.058	1
PFOA/PFOS, Total	ND		ug/kg	1.06	0.045	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
 Client ID: RB23_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	79		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	84		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	88		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	62		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	6		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	55		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	85		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	77		26-160

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-10
Client ID: SOFB05_071019
Sample Location: BRONX, NY

Date Collected: 07/10/19 14:50
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 07/24/19 11:01
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/23/19 08:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.09	0.427	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.09	0.414	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.09	0.249	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.09	0.343	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.09	0.236	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.09	0.393	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.09	0.247	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.09	1.39	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.09	0.720	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.09	0.326	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.09	0.527	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.09	0.318	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.09	1.27	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.09	0.678	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.09	0.272	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.09	1.02	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.09	0.607	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.09	0.841	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.09	0.389	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.09	0.342	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.09	0.259	1
PFOA/PFOS, Total	ND		ng/l	2.09	0.247	1

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-10
Client ID: SOFB05_071019
Sample Location: BRONX, NY

Date Collected: 07/10/19 14:50
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	110		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	118		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	119		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	112		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	116		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	110		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	83		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	110		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	112		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	97		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	76		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	84		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	27		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	77		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	77		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/11/19 14:35
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatle Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1258437-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.
Hexachlorobenzene	ND		ug/kg	100	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	170	16.
1,2-Dichlorobenzene	ND		ug/kg	170	30.
1,3-Dichlorobenzene	ND		ug/kg	170	28.
1,4-Dichlorobenzene	ND		ug/kg	170	29.
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.
2,4-Dinitrotoluene	ND		ug/kg	170	33.
2,6-Dinitrotoluene	ND		ug/kg	170	28.
Fluoranthene	ND		ug/kg	100	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.
4-Bromophenyl phenyl ether	ND		ug/kg	170	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	170	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	170	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	57.
Butyl benzyl phthalate	ND		ug/kg	170	42.
Di-n-butylphthalate	ND		ug/kg	170	31.
Di-n-octylphthalate	ND		ug/kg	170	56.
Diethyl phthalate	ND		ug/kg	170	15.

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/11/19 14:35
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1258437-1					
Dimethyl phthalate	ND		ug/kg	170	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	170	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	170	30.
2-Nitroaniline	ND		ug/kg	170	32.
3-Nitroaniline	ND		ug/kg	170	31.
4-Nitroaniline	ND		ug/kg	170	69.
Dibenzofuran	ND		ug/kg	170	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	17.
Acetophenone	ND		ug/kg	170	20.
2,4,6-Trichlorophenol	ND		ug/kg	100	31.
p-Chloro-m-cresol	ND		ug/kg	170	25.
2-Chlorophenol	ND		ug/kg	170	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	170	55.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270D
Analytical Date: 07/11/19 14:35
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 07/11/19 06:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-09 Batch: WG1258437-1					
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	170	25.
2-Methylphenol	ND		ug/kg	170	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	170	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	170	51.
Carbazole	ND		ug/kg	170	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	78		18-120

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/24/19 11:34
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/23/19 08:45

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 10 Batch: WG1263200-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/24/19 11:34
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 07/23/19 08:45

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 10 Batch: WG1263200-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	119		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	122		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	126		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	126		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	123		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	123		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	114		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	89		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	114		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	112		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	106		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	87		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	99		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	104		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	48		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	91		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	94		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	89		33-143

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 07/26/19 21:33
Analyst: JW

Extraction Method: EPA 537(M)
Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-09 Batch: WG1264347-1					
Perfluorobutanoic Acid (PFBA)	0.104	J	ug/kg	1.00	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.00	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.00	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.136
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.00	0.130
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.00	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054
PFOA/PFOS, Total	ND		ug/kg	1.00	0.042

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 122,537(M)
Analytical Date: 07/26/19 21:33
Analyst: JW

Extraction Method: EPA 537(M)
Extraction Date: 07/25/19 10:12

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-09 Batch: WG1264347-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	74		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	79		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	77		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	85		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	93		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	73		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	62		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		26-160

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1258437-2 WG1258437-3								
Acenaphthene	76		63		31-137	19		50
1,2,4-Trichlorobenzene	75		60		38-107	22		50
Hexachlorobenzene	79		65		40-140	19		50
Bis(2-chloroethyl)ether	73		60		40-140	20		50
2-Chloronaphthalene	82		66		40-140	22		50
1,2-Dichlorobenzene	73		58		40-140	23		50
1,3-Dichlorobenzene	72		58		40-140	22		50
1,4-Dichlorobenzene	71		57		28-104	22		50
3,3'-Dichlorobenzidine	64		60		40-140	6		50
2,4-Dinitrotoluene	81		66		40-132	20		50
2,6-Dinitrotoluene	87		71		40-140	20		50
Fluoranthene	80		64		40-140	22		50
4-Chlorophenyl phenyl ether	78		64		40-140	20		50
4-Bromophenyl phenyl ether	82		67		40-140	20		50
Bis(2-chloroisopropyl)ether	72		56		40-140	25		50
Bis(2-chloroethoxy)methane	80		62		40-117	25		50
Hexachlorobutadiene	76		62		40-140	20		50
Hexachlorocyclopentadiene	84		69		40-140	20		50
Hexachloroethane	72		58		40-140	22		50
Isophorone	78		61		40-140	24		50
Naphthalene	77		60		40-140	25		50
Nitrobenzene	75		59		40-140	24		50
NDPA/DPA	80		66		36-157	19		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1258437-2 WG1258437-3								
n-Nitrosodi-n-propylamine	79		60		32-121	27		50
Bis(2-ethylhexyl)phthalate	86		70		40-140	21		50
Butyl benzyl phthalate	84		68		40-140	21		50
Di-n-butylphthalate	82		67		40-140	20		50
Di-n-octylphthalate	81		67		40-140	19		50
Diethyl phthalate	78		65		40-140	18		50
Dimethyl phthalate	85		69		40-140	21		50
Benzo(a)anthracene	76		63		40-140	19		50
Benzo(a)pyrene	81		66		40-140	20		50
Benzo(b)fluoranthene	77		63		40-140	20		50
Benzo(k)fluoranthene	78		64		40-140	20		50
Chrysene	74		62		40-140	18		50
Acenaphthylene	85		67		40-140	24		50
Anthracene	79		65		40-140	19		50
Benzo(ghi)perylene	75		60		40-140	22		50
Fluorene	78		65		40-140	18		50
Phenanthrene	77		63		40-140	20		50
Dibenzo(a,h)anthracene	76		60		40-140	24		50
Indeno(1,2,3-cd)pyrene	76		61		40-140	22		50
Pyrene	80		64		35-142	22		50
Biphenyl	89		70		54-104	24		50
4-Chloroaniline	56		45		40-140	22		50
2-Nitroaniline	86		68		47-134	23		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1258437-2 WG1258437-3								
3-Nitroaniline	76		65		26-129	16		50
4-Nitroaniline	87		71		41-125	20		50
Dibenzofuran	78		63		40-140	21		50
2-Methylnaphthalene	78		62		40-140	23		50
1,2,4,5-Tetrachlorobenzene	85		68		40-117	22		50
Acetophenone	84		65		14-144	26		50
2,4,6-Trichlorophenol	83		67		30-130	21		50
p-Chloro-m-cresol	88		68		26-103	26		50
2-Chlorophenol	79		63		25-102	23		50
2,4-Dichlorophenol	85		68		30-130	22		50
2,4-Dimethylphenol	89		70		30-130	24		50
2-Nitrophenol	81		64		30-130	23		50
4-Nitrophenol	80		65		11-114	21		50
2,4-Dinitrophenol	61		53		4-130	14		50
4,6-Dinitro-o-cresol	82		69		10-130	17		50
Pentachlorophenol	86		70		17-109	21		50
Phenol	81		64		26-90	23		50
2-Methylphenol	82		65		30-130	23		50
3-Methylphenol/4-Methylphenol	84		66		30-130	24		50
2,4,5-Trichlorophenol	88		73		30-130	19		50
Benzoic Acid	50		41		10-110	20		50
Benzyl Alcohol	84		65		40-140	26		50
Carbazole	79		65		54-128	19		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-09 Batch: WG1258437-2 WG1258437-3								
1,4-Dioxane	59		51		40-140	15		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	76		68		25-120
Phenol-d6	80		71		10-120
Nitrobenzene-d5	76		67		23-120
2-Fluorobiphenyl	83		75		30-120
2,4,6-Tribromophenol	81		77		10-136
4-Terphenyl-d14	81		76		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 10 Batch: WG1263200-2 WG1263200-3								
Perfluorobutanoic Acid (PFBA)	93		97		67-148	4		30
Perfluoropentanoic Acid (PFPeA)	96		100		63-161	4		30
Perfluorobutanesulfonic Acid (PFBS)	91		93		65-157	2		30
Perfluorohexanoic Acid (PFHxA)	102		105		69-168	3		30
Perfluoroheptanoic Acid (PFHpA)	93		97		58-159	4		30
Perfluorohexanesulfonic Acid (PFHxS)	95		104		69-177	9		30
Perfluorooctanoic Acid (PFOA)	99		99		63-159	0		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	102		98		49-187	4		30
Perfluoroheptanesulfonic Acid (PFHpS)	100		95		61-179	5		30
Perfluorononanoic Acid (PFNA)	98		105		68-171	7		30
Perfluorooctanesulfonic Acid (PFOS)	84		84		52-151	0		30
Perfluorodecanoic Acid (PFDA)	101		102		63-171	1		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	99		96		56-173	3		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	105		112		60-166	6		30
Perfluoroundecanoic Acid (PFUnA)	88		93		60-153	6		30
Perfluorodecanesulfonic Acid (PFDS)	94		93		38-156	1		30
Perfluorooctanesulfonamide (FOSA)	93		95		46-170	2		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	97		100		45-170	3		30
Perfluorododecanoic Acid (PFDoA)	92		98		67-153	6		30
Perfluorotridecanoic Acid (PFTrDA)	88		91		48-158	3		30
Perfluorotetradecanoic Acid (PFTA)	104		107		59-182	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 10 Batch: WG1263200-2 WG1263200-3									

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		117		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	110		121		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	112		119		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	111		123		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		118		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	112		115		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	101		114		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	85		93		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	104		112		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		115		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		108		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	85		94		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	79		91		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	88		105		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	50		57		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	77		88		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		95		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		93		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-09 Batch: WG1264347-2 WG1264347-3								
Perfluorobutanoic Acid (PFBA)	113		110		71-135	3		30
Perfluoropentanoic Acid (PFPeA)	119		118		69-132	1		30
Perfluorobutanesulfonic Acid (PFBS)	114		110		72-128	4		30
Perfluorohexanoic Acid (PFHxA)	124		122		70-132	2		30
Perfluoroheptanoic Acid (PFHpA)	110		108		71-131	2		30
Perfluorohexanesulfonic Acid (PFHxS)	116		109		67-130	6		30
Perfluorooctanoic Acid (PFOA)	116		115		69-133	1		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	115		112		64-140	3		30
Perfluoroheptanesulfonic Acid (PFHpS)	122		112		70-132	9		30
Perfluorononanoic Acid (PFNA)	120		117		72-129	3		30
Perfluorooctanesulfonic Acid (PFOS)	106		103		68-136	3		30
Perfluorodecanoic Acid (PFDA)	120		117		69-133	3		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	124		115		65-137	8		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	108		117		63-144	8		30
Perfluoroundecanoic Acid (PFUnA)	103		103		64-136	0		30
Perfluorodecanesulfonic Acid (PFDS)	122		121		59-134	1		30
Perfluorooctanesulfonamide (FOSA)	134		113		67-137	17		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	92		105		61-139	13		30
Perfluorododecanoic Acid (PFDoA)	112		106		69-135	6		30
Perfluorotridecanoic Acid (PFTrDA)	112		108		66-139	4		30
Perfluorotetradecanoic Acid (PFTA)	124		122		69-133	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-09 Batch: WG1264347-2 WG1264347-3									

Surrogate (Extracted Internal Standard)	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
Perfluoro[13C4]Butanoic Acid (MPFBA)	79		74		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	83		79		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90		89		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	78		77		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		80		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	90		93		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	82		82		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	92		93		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87		89		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		85		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	82		83		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	94		94		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	74		72		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		88		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	2		2		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74		71		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	81		85		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	74		79		26-160

PCBS

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
Client ID: RB24_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/12/19 01:59
Analyst: HT
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 07/11/19 10:09
Cleanup Method: EPA 3665A
Cleanup Date: 07/11/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.8	3.26	1	A
Aroclor 1221	ND		ug/kg	36.8	3.68	1	A
Aroclor 1232	ND		ug/kg	36.8	7.79	1	A
Aroclor 1242	ND		ug/kg	36.8	4.96	1	A
Aroclor 1248	ND		ug/kg	36.8	5.52	1	A
Aroclor 1254	ND		ug/kg	36.8	4.02	1	A
Aroclor 1260	ND		ug/kg	36.8	6.79	1	A
Aroclor 1262	ND		ug/kg	36.8	4.67	1	A
Aroclor 1268	ND		ug/kg	36.8	3.81	1	A
PCBs, Total	ND		ug/kg	36.8	3.26	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
 Client ID: RB24_8-10
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 07/12/19 02:12
 Analyst: HT
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 10:09
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/11/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.2	3.12	1	A
Aroclor 1221	ND		ug/kg	35.2	3.52	1	A
Aroclor 1232	ND		ug/kg	35.2	7.46	1	A
Aroclor 1242	ND		ug/kg	35.2	4.74	1	A
Aroclor 1248	ND		ug/kg	35.2	5.28	1	A
Aroclor 1254	4.02	J	ug/kg	35.2	3.85	1	B
Aroclor 1260	ND		ug/kg	35.2	6.50	1	A
Aroclor 1262	ND		ug/kg	35.2	4.47	1	A
Aroclor 1268	ND		ug/kg	35.2	3.64	1	A
PCBs, Total	4.02	J	ug/kg	35.2	3.12	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
 Client ID: RB24_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 07/12/19 02:24
 Analyst: HT
 Percent Solids: 66%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 10:09
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/11/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	47.8	4.24	1	A
Aroclor 1221	ND		ug/kg	47.8	4.79	1	A
Aroclor 1232	ND		ug/kg	47.8	10.1	1	A
Aroclor 1242	ND		ug/kg	47.8	6.44	1	A
Aroclor 1248	ND		ug/kg	47.8	7.17	1	A
Aroclor 1254	ND		ug/kg	47.8	5.23	1	A
Aroclor 1260	ND		ug/kg	47.8	8.83	1	B
Aroclor 1262	ND		ug/kg	47.8	6.07	1	A
Aroclor 1268	ND		ug/kg	47.8	4.95	1	A
PCBs, Total	ND		ug/kg	47.8	4.24	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
Client ID: RB26_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/12/19 02:36
Analyst: HT
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 07/11/19 10:09
Cleanup Method: EPA 3665A
Cleanup Date: 07/11/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.3	3.22	1	A
Aroclor 1221	ND		ug/kg	36.3	3.64	1	A
Aroclor 1232	ND		ug/kg	36.3	7.69	1	A
Aroclor 1242	ND		ug/kg	36.3	4.89	1	A
Aroclor 1248	ND		ug/kg	36.3	5.44	1	A
Aroclor 1254	ND		ug/kg	36.3	3.97	1	A
Aroclor 1260	ND		ug/kg	36.3	6.70	1	A
Aroclor 1262	ND		ug/kg	36.3	4.61	1	A
Aroclor 1268	ND		ug/kg	36.3	3.76	1	A
PCBs, Total	ND		ug/kg	36.3	3.22	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
Client ID: RB26_10-12
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/12/19 02:48
Analyst: HT
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 07/11/19 10:09
Cleanup Method: EPA 3665A
Cleanup Date: 07/11/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.7	3.08	1	A
Aroclor 1221	ND		ug/kg	34.7	3.48	1	A
Aroclor 1232	ND		ug/kg	34.7	7.35	1	A
Aroclor 1242	ND		ug/kg	34.7	4.68	1	A
Aroclor 1248	ND		ug/kg	34.7	5.20	1	A
Aroclor 1254	ND		ug/kg	34.7	3.79	1	A
Aroclor 1260	ND		ug/kg	34.7	6.41	1	A
Aroclor 1262	ND		ug/kg	34.7	4.40	1	A
Aroclor 1268	ND		ug/kg	34.7	3.59	1	A
PCBs, Total	ND		ug/kg	34.7	3.08	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
Client ID: RB26_14-16
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/12/19 03:00
Analyst: HT
Percent Solids: 60%

Extraction Method: EPA 3546
Extraction Date: 07/11/19 10:09
Cleanup Method: EPA 3665A
Cleanup Date: 07/11/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	54.5	4.84	1	A
Aroclor 1221	ND		ug/kg	54.5	5.46	1	A
Aroclor 1232	ND		ug/kg	54.5	11.6	1	A
Aroclor 1242	ND		ug/kg	54.5	7.35	1	A
Aroclor 1248	ND		ug/kg	54.5	8.18	1	A
Aroclor 1254	16.2	J	ug/kg	54.5	5.96	1	B
Aroclor 1260	ND		ug/kg	54.5	10.1	1	A
Aroclor 1262	ND		ug/kg	54.5	6.92	1	A
Aroclor 1268	ND		ug/kg	54.5	5.65	1	A
PCBs, Total	16.2	J	ug/kg	54.5	4.84	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
 Client ID: RB23_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 07/12/19 03:13
 Analyst: HT
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 10:09
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/11/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.1	3.12	1	A
Aroclor 1221	ND		ug/kg	35.1	3.52	1	A
Aroclor 1232	ND		ug/kg	35.1	7.44	1	A
Aroclor 1242	ND		ug/kg	35.1	4.73	1	A
Aroclor 1248	ND		ug/kg	35.1	5.26	1	A
Aroclor 1254	ND		ug/kg	35.1	3.84	1	A
Aroclor 1260	ND		ug/kg	35.1	6.48	1	A
Aroclor 1262	ND		ug/kg	35.1	4.46	1	A
Aroclor 1268	ND		ug/kg	35.1	3.64	1	A
PCBs, Total	ND		ug/kg	35.1	3.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 07/12/19 03:25
 Analyst: HT
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 10:09
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/11/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.2	3.30	1	A
Aroclor 1221	ND		ug/kg	37.2	3.72	1	A
Aroclor 1232	ND		ug/kg	37.2	7.88	1	A
Aroclor 1242	ND		ug/kg	37.2	5.01	1	A
Aroclor 1248	ND		ug/kg	37.2	5.58	1	A
Aroclor 1254	ND		ug/kg	37.2	4.07	1	A
Aroclor 1260	ND		ug/kg	37.2	6.87	1	A
Aroclor 1262	ND		ug/kg	37.2	4.72	1	A
Aroclor 1268	ND		ug/kg	37.2	3.85	1	A
PCBs, Total	ND		ug/kg	37.2	3.30	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	55		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
 Client ID: RB23_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 07/12/19 03:37
 Analyst: HT
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 10:09
 Cleanup Method: EPA 3665A
 Cleanup Date: 07/11/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	40.2	3.57	1	A
Aroclor 1221	ND		ug/kg	40.2	4.03	1	A
Aroclor 1232	ND		ug/kg	40.2	8.52	1	A
Aroclor 1242	ND		ug/kg	40.2	5.42	1	A
Aroclor 1248	ND		ug/kg	40.2	6.03	1	A
Aroclor 1254	ND		ug/kg	40.2	4.40	1	A
Aroclor 1260	ND		ug/kg	40.2	7.43	1	A
Aroclor 1262	ND		ug/kg	40.2	5.10	1	A
Aroclor 1268	ND		ug/kg	40.2	4.16	1	A
PCBs, Total	ND		ug/kg	40.2	3.57	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/12/19 01:22
Analyst: HT

Extraction Method: EPA 3546
Extraction Date: 07/11/19 10:09
Cleanup Method: EPA 3665A
Cleanup Date: 07/11/19
Cleanup Method: EPA 3660B
Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-09 Batch: WG1258585-1						
Aroclor 1016	ND		ug/kg	31.9	2.84	A
Aroclor 1221	ND		ug/kg	31.9	3.20	A
Aroclor 1232	ND		ug/kg	31.9	6.77	A
Aroclor 1242	ND		ug/kg	31.9	4.30	A
Aroclor 1248	ND		ug/kg	31.9	4.79	A
Aroclor 1254	ND		ug/kg	31.9	3.49	A
Aroclor 1260	ND		ug/kg	31.9	5.90	A
Aroclor 1262	ND		ug/kg	31.9	4.05	A
Aroclor 1268	ND		ug/kg	31.9	3.31	A
PCBs, Total	ND		ug/kg	31.9	2.84	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	68		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1258585-2 WG1258585-3									
Aroclor 1016	75		72		40-140	4		50	A
Aroclor 1260	66		64		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		72		30-150	A
Decachlorobiphenyl	74		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		71		30-150	B
Decachlorobiphenyl	78		75		30-150	B

PESTICIDES

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
 Client ID: RB24_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 07/12/19 14:06
 Analyst: SL
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 09:05
 Cleanup Method: EPA 3620B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.348	1	A
Lindane	ND		ug/kg	0.741	0.331	1	A
Alpha-BHC	ND		ug/kg	0.741	0.210	1	A
Beta-BHC	ND		ug/kg	1.78	0.674	1	A
Heptachlor	ND		ug/kg	0.889	0.398	1	A
Aldrin	ND		ug/kg	1.78	0.626	1	A
Heptachlor epoxide	ND		ug/kg	3.33	1.00	1	A
Endrin	ND		ug/kg	0.741	0.304	1	A
Endrin aldehyde	ND		ug/kg	2.22	0.778	1	A
Endrin ketone	ND		ug/kg	1.78	0.458	1	A
Dieldrin	ND		ug/kg	1.11	0.556	1	A
4,4'-DDE	ND		ug/kg	1.78	0.411	1	A
4,4'-DDD	ND		ug/kg	1.78	0.634	1	A
4,4'-DDT	ND		ug/kg	3.33	1.43	1	A
Endosulfan I	ND		ug/kg	1.78	0.420	1	A
Endosulfan II	ND		ug/kg	1.78	0.594	1	A
Endosulfan sulfate	ND		ug/kg	0.741	0.352	1	A
Methoxychlor	ND		ug/kg	3.33	1.04	1	A
Toxaphene	ND		ug/kg	33.3	9.33	1	A
cis-Chlordane	ND		ug/kg	2.22	0.619	1	A
trans-Chlordane	ND		ug/kg	2.22	0.587	1	A
Chlordane	ND		ug/kg	14.4	5.89	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
 Client ID: RB24_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	72		30-150	B
2,4,5,6-Tetrachloro-m-xylene	94		30-150	A
Decachlorobiphenyl	40		30-150	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
 Client ID: RB24_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 07/12/19 17:27
 Analyst: SL
 Percent Solids: 90%
 Methylation Date: 07/12/19 03:45

Extraction Method: EPA 8151A
 Extraction Date: 07/11/19 05:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	184	11.6	1	A
2,4,5-T	ND		ug/kg	184	5.71	1	A
2,4,5-TP (Silvex)	ND		ug/kg	184	4.90	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	84		30-150	A
DCAA	75		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
 Client ID: RB24_8-10
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 07/12/19 14:18
 Analyst: SL
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 09:05
 Cleanup Method: EPA 3620B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.68	0.328	1	A
Lindane	ND		ug/kg	0.699	0.312	1	A
Alpha-BHC	ND		ug/kg	0.699	0.198	1	A
Beta-BHC	ND		ug/kg	1.68	0.636	1	A
Heptachlor	ND		ug/kg	0.838	0.376	1	A
Aldrin	ND		ug/kg	1.68	0.590	1	A
Heptachlor epoxide	ND		ug/kg	3.14	0.943	1	A
Endrin	ND		ug/kg	0.699	0.286	1	A
Endrin aldehyde	ND		ug/kg	2.10	0.734	1	A
Endrin ketone	ND		ug/kg	1.68	0.432	1	A
Dieldrin	ND		ug/kg	1.05	0.524	1	A
4,4'-DDE	ND		ug/kg	1.68	0.388	1	B
4,4'-DDD	ND		ug/kg	1.68	0.598	1	A
4,4'-DDT	ND		ug/kg	3.14	1.35	1	A
Endosulfan I	ND		ug/kg	1.68	0.396	1	A
Endosulfan II	ND		ug/kg	1.68	0.560	1	A
Endosulfan sulfate	ND		ug/kg	0.699	0.333	1	A
Methoxychlor	ND		ug/kg	3.14	0.978	1	A
Toxaphene	ND		ug/kg	31.4	8.80	1	A
cis-Chlordane	ND		ug/kg	2.10	0.584	1	A
trans-Chlordane	ND		ug/kg	2.10	0.553	1	A
Chlordane	ND		ug/kg	13.6	5.56	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
 Client ID: RB24_8-10
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	57		30-150	B
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	38		30-150	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
 Client ID: RB24_8-10
 Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 07/12/19 17:46
 Analyst: SL
 Percent Solids: 94%
 Methylation Date: 07/12/19 03:45

Extraction Method: EPA 8151A
 Extraction Date: 07/11/19 05:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	176	11.1	1	A
2,4,5-T	ND		ug/kg	176	5.47	1	A
2,4,5-TP (Silvex)	ND		ug/kg	176	4.69	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	83		30-150	A
DCAA	67		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
 Client ID: RB24_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 07/12/19 14:31
 Analyst: SL
 Percent Solids: 66%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 09:05
 Cleanup Method: EPA 3620B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.36	0.463	1	A
Lindane	ND		ug/kg	0.985	0.440	1	A
Alpha-BHC	ND		ug/kg	0.985	0.280	1	A
Beta-BHC	ND		ug/kg	2.36	0.896	1	A
Heptachlor	ND		ug/kg	1.18	0.530	1	A
Aldrin	ND		ug/kg	2.36	0.832	1	A
Heptachlor epoxide	ND		ug/kg	4.43	1.33	1	A
Endrin	ND		ug/kg	0.985	0.404	1	A
Endrin aldehyde	ND		ug/kg	2.95	1.03	1	A
Endrin ketone	ND		ug/kg	2.36	0.609	1	A
Dieldrin	ND		ug/kg	1.48	0.739	1	A
4,4'-DDE	ND		ug/kg	2.36	0.547	1	A
4,4'-DDD	ND		ug/kg	2.36	0.843	1	A
4,4'-DDT	ND		ug/kg	4.43	1.90	1	A
Endosulfan I	ND		ug/kg	2.36	0.558	1	A
Endosulfan II	ND		ug/kg	2.36	0.790	1	A
Endosulfan sulfate	ND		ug/kg	0.985	0.469	1	A
Methoxychlor	ND		ug/kg	4.43	1.38	1	A
Toxaphene	ND		ug/kg	44.3	12.4	1	A
cis-Chlordane	ND		ug/kg	2.95	0.823	1	A
trans-Chlordane	ND		ug/kg	2.95	0.780	1	A
Chlordane	ND		ug/kg	19.2	7.83	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
 Client ID: RB24_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	B
Decachlorobiphenyl	62		30-150	B
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	46		30-150	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
 Client ID: RB24_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 07/12/19 18:05
 Analyst: SL
 Percent Solids: 66%
 Methylation Date: 07/12/19 03:45

Extraction Method: EPA 8151A
 Extraction Date: 07/11/19 05:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	253	16.0	1	A
2,4,5-T	ND		ug/kg	253	7.86	1	A
2,4,5-TP (Silvex)	ND		ug/kg	253	6.74	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	76		30-150	A
DCAA	66		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
 Client ID: RB26_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 07/12/19 14:44
 Analyst: SL
 Percent Solids: 91%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 09:05
 Cleanup Method: EPA 3620B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.74	0.341	1	A
Lindane	ND		ug/kg	0.726	0.324	1	A
Alpha-BHC	ND		ug/kg	0.726	0.206	1	A
Beta-BHC	ND		ug/kg	1.74	0.660	1	A
Heptachlor	ND		ug/kg	0.871	0.390	1	A
Aldrin	ND		ug/kg	1.74	0.613	1	A
Heptachlor epoxide	ND		ug/kg	3.26	0.980	1	A
Endrin	ND		ug/kg	0.726	0.298	1	A
Endrin aldehyde	ND		ug/kg	2.18	0.762	1	A
Endrin ketone	ND		ug/kg	1.74	0.448	1	A
Dieldrin	ND		ug/kg	1.09	0.544	1	A
4,4'-DDE	ND		ug/kg	1.74	0.403	1	A
4,4'-DDD	ND		ug/kg	1.74	0.621	1	A
4,4'-DDT	ND		ug/kg	3.26	1.40	1	A
Endosulfan I	ND		ug/kg	1.74	0.411	1	A
Endosulfan II	ND		ug/kg	1.74	0.582	1	A
Endosulfan sulfate	ND		ug/kg	0.726	0.345	1	A
Methoxychlor	ND		ug/kg	3.26	1.02	1	A
Toxaphene	ND		ug/kg	32.6	9.14	1	A
cis-Chlordane	ND		ug/kg	2.18	0.607	1	A
trans-Chlordane	ND		ug/kg	2.18	0.575	1	A
Chlordane	ND		ug/kg	14.2	5.77	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
 Client ID: RB26_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	89		30-150	B
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	56		30-150	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
 Client ID: RB26_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 07/12/19 18:24
 Analyst: SL
 Percent Solids: 91%
 Methylation Date: 07/12/19 03:45

Extraction Method: EPA 8151A
 Extraction Date: 07/11/19 05:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	181	11.4	1	A
2,4,5-T	ND		ug/kg	181	5.61	1	A
2,4,5-TP (Silvex)	ND		ug/kg	181	4.81	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	84		30-150	A
DCAA	71		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
 Client ID: RB26_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 07/12/19 14:56
 Analyst: SL
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 09:05
 Cleanup Method: EPA 3620B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.69	0.332	1	A
Lindane	ND		ug/kg	0.706	0.316	1	A
Alpha-BHC	ND		ug/kg	0.706	0.200	1	A
Beta-BHC	ND		ug/kg	1.69	0.642	1	A
Heptachlor	ND		ug/kg	0.847	0.380	1	A
Aldrin	ND		ug/kg	1.69	0.597	1	A
Heptachlor epoxide	ND		ug/kg	3.18	0.953	1	A
Endrin	ND		ug/kg	0.706	0.289	1	A
Endrin aldehyde	ND		ug/kg	2.12	0.741	1	A
Endrin ketone	ND		ug/kg	1.69	0.436	1	A
Dieldrin	ND		ug/kg	1.06	0.530	1	A
4,4'-DDE	ND		ug/kg	1.69	0.392	1	A
4,4'-DDD	ND		ug/kg	1.69	0.604	1	A
4,4'-DDT	ND		ug/kg	3.18	1.36	1	A
Endosulfan I	ND		ug/kg	1.69	0.400	1	A
Endosulfan II	ND		ug/kg	1.69	0.566	1	A
Endosulfan sulfate	ND		ug/kg	0.706	0.336	1	A
Methoxychlor	ND		ug/kg	3.18	0.988	1	A
Toxaphene	ND		ug/kg	31.8	8.90	1	A
cis-Chlordane	ND		ug/kg	2.12	0.590	1	A
trans-Chlordane	ND		ug/kg	2.12	0.559	1	A
Chlordane	ND		ug/kg	13.8	5.61	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
 Client ID: RB26_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	52		30-150	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
 Client ID: RB26_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 07/12/19 18:43
 Analyst: SL
 Percent Solids: 93%
 Methylation Date: 07/12/19 03:45

Extraction Method: EPA 8151A
 Extraction Date: 07/11/19 05:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	175	11.0	1	A
2,4,5-T	ND		ug/kg	175	5.41	1	A
2,4,5-TP (Silvex)	ND		ug/kg	175	4.64	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	77		30-150	A
DCAA	72		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
 Client ID: RB26_14-16
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 07/12/19 15:09
 Analyst: SL
 Percent Solids: 60%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 09:05
 Cleanup Method: EPA 3620B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.61	0.512	1	A
Lindane	ND		ug/kg	1.09	0.487	1	A
Alpha-BHC	ND		ug/kg	1.09	0.309	1	A
Beta-BHC	ND		ug/kg	2.61	0.991	1	A
Heptachlor	ND		ug/kg	1.31	0.586	1	A
Aldrin	ND		ug/kg	2.61	0.920	1	A
Heptachlor epoxide	ND		ug/kg	4.90	1.47	1	A
Endrin	ND		ug/kg	1.09	0.446	1	A
Endrin aldehyde	ND		ug/kg	3.27	1.14	1	A
Endrin ketone	ND		ug/kg	2.61	0.673	1	A
Dieldrin	ND		ug/kg	1.63	0.817	1	A
4,4'-DDE	ND		ug/kg	2.61	0.604	1	A
4,4'-DDD	ND		ug/kg	2.61	0.932	1	A
4,4'-DDT	ND		ug/kg	4.90	2.10	1	A
Endosulfan I	ND		ug/kg	2.61	0.618	1	A
Endosulfan II	ND		ug/kg	2.61	0.873	1	A
Endosulfan sulfate	ND		ug/kg	1.09	0.518	1	A
Methoxychlor	ND		ug/kg	4.90	1.52	1	A
Toxaphene	ND		ug/kg	49.0	13.7	1	A
cis-Chlordane	ND		ug/kg	3.27	0.910	1	A
trans-Chlordane	ND		ug/kg	3.27	0.862	1	A
Chlordane	ND		ug/kg	21.2	8.66	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
 Client ID: RB26_14-16
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	586	Q	30-150	A
Decachlorobiphenyl	55		30-150	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
 Client ID: RB26_14-16
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 07/12/19 19:01
 Analyst: SL
 Percent Solids: 60%
 Methylation Date: 07/12/19 03:45

Extraction Method: EPA 8151A
 Extraction Date: 07/11/19 05:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	274	17.3	1	A
2,4,5-T	ND		ug/kg	274	8.51	1	A
2,4,5-TP (Silvex)	ND		ug/kg	274	7.30	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	91		30-150	A
DCAA	76		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
 Client ID: RB23_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 07/12/19 15:22
 Analyst: SL
 Percent Solids: 93%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 09:05
 Cleanup Method: EPA 3620B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.332	1	A
Lindane	ND		ug/kg	0.706	0.316	1	A
Alpha-BHC	ND		ug/kg	0.706	0.201	1	A
Beta-BHC	ND		ug/kg	1.70	0.643	1	A
Heptachlor	ND		ug/kg	0.848	0.380	1	A
Aldrin	ND		ug/kg	1.70	0.597	1	A
Heptachlor epoxide	ND		ug/kg	3.18	0.954	1	A
Endrin	ND		ug/kg	0.706	0.290	1	A
Endrin aldehyde	ND		ug/kg	2.12	0.742	1	A
Endrin ketone	ND		ug/kg	1.70	0.436	1	A
Dieldrin	ND		ug/kg	1.06	0.530	1	A
4,4'-DDE	ND		ug/kg	1.70	0.392	1	A
4,4'-DDD	ND		ug/kg	1.70	0.605	1	A
4,4'-DDT	ND		ug/kg	3.18	1.36	1	A
Endosulfan I	ND		ug/kg	1.70	0.400	1	A
Endosulfan II	ND		ug/kg	1.70	0.566	1	A
Endosulfan sulfate	ND		ug/kg	0.706	0.336	1	A
Methoxychlor	ND		ug/kg	3.18	0.989	1	A
Toxaphene	ND		ug/kg	31.8	8.90	1	A
cis-Chlordane	ND		ug/kg	2.12	0.590	1	A
trans-Chlordane	ND		ug/kg	2.12	0.560	1	A
Chlordane	ND		ug/kg	13.8	5.62	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
 Client ID: RB23_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	53		30-150	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
 Client ID: RB23_0-2
 Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 07/12/19 19:20
 Analyst: SL
 Percent Solids: 93%
 Methylation Date: 07/12/19 03:45

Extraction Method: EPA 8151A
 Extraction Date: 07/11/19 05:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	179	11.2	1	A
2,4,5-T	ND		ug/kg	179	5.54	1	A
2,4,5-TP (Silvex)	ND		ug/kg	179	4.75	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	66		30-150	A
DCAA	55		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 07/12/19 15:34
 Analyst: SL
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 09:05
 Cleanup Method: EPA 3620B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.351	1	A
Lindane	ND		ug/kg	0.747	0.334	1	A
Alpha-BHC	ND		ug/kg	0.747	0.212	1	A
Beta-BHC	ND		ug/kg	1.79	0.680	1	A
Heptachlor	ND		ug/kg	0.896	0.402	1	A
Aldrin	ND		ug/kg	1.79	0.631	1	A
Heptachlor epoxide	ND		ug/kg	3.36	1.01	1	A
Endrin	ND		ug/kg	0.747	0.306	1	A
Endrin aldehyde	ND		ug/kg	2.24	0.784	1	A
Endrin ketone	ND		ug/kg	1.79	0.462	1	A
Dieldrin	ND		ug/kg	1.12	0.560	1	A
4,4'-DDE	ND		ug/kg	1.79	0.414	1	A
4,4'-DDD	ND		ug/kg	1.79	0.639	1	A
4,4'-DDT	ND		ug/kg	3.36	1.44	1	A
Endosulfan I	ND		ug/kg	1.79	0.423	1	A
Endosulfan II	ND		ug/kg	1.79	0.599	1	A
Endosulfan sulfate	ND		ug/kg	0.747	0.355	1	A
Methoxychlor	ND		ug/kg	3.36	1.04	1	A
Toxaphene	ND		ug/kg	33.6	9.41	1	A
cis-Chlordane	ND		ug/kg	2.24	0.624	1	A
trans-Chlordane	ND		ug/kg	2.24	0.591	1	A
Chlordane	ND		ug/kg	14.6	5.94	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	73		30-150	B
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	62		30-150	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
 Client ID: RB23_10-12
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 07/12/19 19:39
 Analyst: SL
 Percent Solids: 85%
 Methylation Date: 07/12/19 03:45

Extraction Method: EPA 8151A
 Extraction Date: 07/11/19 05:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	192	12.1	1	A
2,4,5-T	ND		ug/kg	192	5.96	1	A
2,4,5-TP (Silvex)	ND		ug/kg	192	5.11	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	90		30-150	A
DCAA	75		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
 Client ID: RB23_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 07/12/19 15:47
 Analyst: SL
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 07/11/19 09:05
 Cleanup Method: EPA 3620B
 Cleanup Date: 07/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.92	0.376	1	A
Lindane	ND		ug/kg	0.801	0.358	1	A
Alpha-BHC	ND		ug/kg	0.801	0.228	1	A
Beta-BHC	ND		ug/kg	1.92	0.729	1	A
Heptachlor	ND		ug/kg	0.961	0.431	1	A
Aldrin	ND		ug/kg	1.92	0.677	1	A
Heptachlor epoxide	ND		ug/kg	3.60	1.08	1	A
Endrin	ND		ug/kg	0.801	0.328	1	A
Endrin aldehyde	ND		ug/kg	2.40	0.841	1	A
Endrin ketone	ND		ug/kg	1.92	0.495	1	A
Dieldrin	ND		ug/kg	1.20	0.601	1	A
4,4'-DDE	ND		ug/kg	1.92	0.445	1	A
4,4'-DDD	ND		ug/kg	1.92	0.686	1	A
4,4'-DDT	ND		ug/kg	3.60	1.55	1	A
Endosulfan I	ND		ug/kg	1.92	0.454	1	A
Endosulfan II	ND		ug/kg	1.92	0.642	1	A
Endosulfan sulfate	ND		ug/kg	0.801	0.381	1	A
Methoxychlor	ND		ug/kg	3.60	1.12	1	A
Toxaphene	ND		ug/kg	36.0	10.1	1	A
cis-Chlordane	ND		ug/kg	2.40	0.670	1	A
trans-Chlordane	ND		ug/kg	2.40	0.634	1	A
Chlordane	ND		ug/kg	15.6	6.37	1	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
 Client ID: RB23_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
 Client ID: RB23_13-15
 Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
 Date Received: 07/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 07/12/19 19:58
 Analyst: SL
 Percent Solids: 81%
 Methylation Date: 07/12/19 03:45

Extraction Method: EPA 8151A
 Extraction Date: 07/11/19 05:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	202	12.8	1	A
2,4,5-T	ND		ug/kg	202	6.28	1	A
2,4,5-TP (Silvex)	ND		ug/kg	202	5.39	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	74		30-150	A
DCAA	68		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 07/12/19 16:12
Analyst: KEG

Extraction Method: EPA 8151A
Extraction Date: 07/11/19 00:48

Methylation Date: 07/12/19 03:45

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1258366-1						
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.03	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.32	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	81		30-150	A
DCAA	72		30-150	B

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/11/19 15:13
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 07/11/19 09:05
Cleanup Method: EPA 3620B
Cleanup Date: 07/11/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1258538-1						
Delta-BHC	ND		ug/kg	1.55	0.304	A
Lindane	ND		ug/kg	0.646	0.289	A
Alpha-BHC	ND		ug/kg	0.646	0.184	A
Beta-BHC	ND		ug/kg	1.55	0.588	A
Heptachlor	ND		ug/kg	0.776	0.348	A
Aldrin	ND		ug/kg	1.55	0.546	A
Heptachlor epoxide	ND		ug/kg	2.91	0.873	A
Endrin	ND		ug/kg	0.646	0.265	A
Endrin aldehyde	ND		ug/kg	1.94	0.679	A
Endrin ketone	ND		ug/kg	1.55	0.399	A
Dieldrin	ND		ug/kg	0.970	0.485	A
4,4'-DDE	ND		ug/kg	1.55	0.359	A
4,4'-DDD	ND		ug/kg	1.55	0.553	A
4,4'-DDT	ND		ug/kg	2.91	1.25	A
Endosulfan I	ND		ug/kg	1.55	0.366	A
Endosulfan II	ND		ug/kg	1.55	0.518	A
Endosulfan sulfate	ND		ug/kg	0.646	0.308	A
Methoxychlor	ND		ug/kg	2.91	0.905	A
Toxaphene	ND		ug/kg	29.1	8.14	A
cis-Chlordane	ND		ug/kg	1.94	0.540	A
trans-Chlordane	ND		ug/kg	1.94	0.512	A
Chlordane	ND		ug/kg	12.6	5.14	A

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/11/19 15:13
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 07/11/19 09:05
Cleanup Method: EPA 3620B
Cleanup Date: 07/11/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-09 Batch: WG1258538-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	49		30-150	B
Decachlorobiphenyl	52		30-150	B
2,4,5,6-Tetrachloro-m-xylene	49		30-150	A
Decachlorobiphenyl	57		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1258366-2 WG1258366-3									
2,4-D	96		89		30-150	8		30	A
2,4,5-T	98		94		30-150	4		30	A
2,4,5-TP (Silvex)	90		87		30-150	3		30	A

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria	Column
DCAA	81		78		30-150	A
DCAA	76		70		30-150	B



Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1258538-2 WG1258538-3									
Delta-BHC	74		85		30-150	14		30	A
Lindane	74		84		30-150	13		30	A
Alpha-BHC	78		89		30-150	13		30	A
Beta-BHC	66		75		30-150	13		30	A
Heptachlor	65		75		30-150	14		30	A
Aldrin	73		83		30-150	13		30	A
Heptachlor epoxide	74		84		30-150	13		30	A
Endrin	76		88		30-150	15		30	A
Endrin aldehyde	50		57		30-150	13		30	A
Endrin ketone	54		64		30-150	17		30	A
Dieldrin	73		85		30-150	15		30	A
4,4'-DDE	72		81		30-150	12		30	A
4,4'-DDD	63		75		30-150	17		30	A
4,4'-DDT	65		75		30-150	14		30	A
Endosulfan I	65		75		30-150	14		30	A
Endosulfan II	65		74		30-150	13		30	A
Endosulfan sulfate	44		48		30-150	9		30	A
Methoxychlor	56		65		30-150	15		30	A
cis-Chlordane	66		73		30-150	10		30	A
trans-Chlordane	65		74		30-150	13		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930096

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-09 Batch: WG1258538-2 WG1258538-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		83		30-150	B
Decachlorobiphenyl	77		89		30-150	B
2,4,5,6-Tetrachloro-m-xylene	74		82		30-150	A
Decachlorobiphenyl	81		95		30-150	A

METALS

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01

Date Collected: 07/10/19 11:45

Client ID: RB24_0-2

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2860		mg/kg	8.50	2.30	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Antimony, Total	0.935	J	mg/kg	4.25	0.323	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Arsenic, Total	5.82		mg/kg	0.850	0.177	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Barium, Total	125		mg/kg	0.850	0.148	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Beryllium, Total	0.187	J	mg/kg	0.425	0.028	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.850	0.083	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Calcium, Total	8260		mg/kg	8.50	2.98	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Chromium, Total	10.4		mg/kg	0.850	0.082	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Cobalt, Total	4.92		mg/kg	1.70	0.141	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Copper, Total	35.1		mg/kg	0.850	0.219	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Iron, Total	11000		mg/kg	4.25	0.768	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Lead, Total	174		mg/kg	4.25	0.228	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Magnesium, Total	1070		mg/kg	8.50	1.31	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Manganese, Total	112		mg/kg	0.850	0.135	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Mercury, Total	0.367		mg/kg	0.070	0.046	1	07/11/19 07:30	07/11/19 12:29	EPA 7471B	1,7471B	GD
Nickel, Total	12.7		mg/kg	2.12	0.206	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Potassium, Total	885		mg/kg	212	12.2	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Selenium, Total	0.332	J	mg/kg	1.70	0.219	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.850	0.241	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Sodium, Total	402		mg/kg	170	2.68	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.70	0.268	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Vanadium, Total	12.0		mg/kg	0.850	0.173	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
Zinc, Total	161		mg/kg	4.25	0.249	2	07/11/19 09:10	07/11/19 18:07	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	10		mg/kg	0.89	0.89	1		07/11/19 22:00	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02

Date Collected: 07/10/19 11:55

Client ID: RB24_8-10

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	12400		mg/kg	8.36	2.26	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.18	0.318	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.836	0.174	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Barium, Total	187		mg/kg	0.836	0.145	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Beryllium, Total	0.259	J	mg/kg	0.418	0.028	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.836	0.082	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Calcium, Total	1820		mg/kg	8.36	2.92	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Chromium, Total	22.8		mg/kg	0.836	0.080	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Cobalt, Total	19.7		mg/kg	1.67	0.139	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Copper, Total	40.0		mg/kg	0.836	0.216	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Iron, Total	23600		mg/kg	4.18	0.755	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Lead, Total	8.82		mg/kg	4.18	0.224	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Magnesium, Total	6360		mg/kg	8.36	1.29	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Manganese, Total	235		mg/kg	0.836	0.133	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Mercury, Total	0.164		mg/kg	0.067	0.044	1	07/11/19 07:30	07/11/19 12:31	EPA 7471B	1,7471B	GD
Nickel, Total	26.0		mg/kg	2.09	0.202	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Potassium, Total	8270		mg/kg	209	12.0	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.67	0.216	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.836	0.236	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Sodium, Total	177		mg/kg	167	2.63	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.67	0.263	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Vanadium, Total	37.9		mg/kg	0.836	0.170	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
Zinc, Total	74.9		mg/kg	4.18	0.245	2	07/11/19 09:10	07/11/19 18:11	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	22	J	mg/kg	0.85	0.85	1		07/11/19 22:00	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03

Date Collected: 07/10/19 12:15

Client ID: RB24_13-15

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 66%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	17800		mg/kg	11.5	3.10	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	5.74	0.436	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Arsenic, Total	1.22		mg/kg	1.15	0.239	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Barium, Total	225		mg/kg	1.15	0.200	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Beryllium, Total	0.448	J	mg/kg	0.574	0.038	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	1.15	0.112	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Calcium, Total	6830		mg/kg	11.5	4.02	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Chromium, Total	35.6		mg/kg	1.15	0.110	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Cobalt, Total	23.8		mg/kg	2.30	0.190	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Copper, Total	95.3		mg/kg	1.15	0.296	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Iron, Total	32000		mg/kg	5.74	1.04	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Lead, Total	108		mg/kg	5.74	0.308	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Magnesium, Total	9620		mg/kg	11.5	1.77	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Manganese, Total	389		mg/kg	1.15	0.182	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Mercury, Total	0.213		mg/kg	0.096	0.063	1	07/11/19 07:30	07/11/19 12:33	EPA 7471B	1,7471B	GD
Nickel, Total	33.8		mg/kg	2.87	0.278	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Potassium, Total	9430		mg/kg	287	16.5	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	2.30	0.296	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	1.15	0.325	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Sodium, Total	331		mg/kg	230	3.62	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	2.30	0.362	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Vanadium, Total	52.9		mg/kg	1.15	0.233	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
Zinc, Total	112		mg/kg	5.74	0.336	2	07/11/19 09:10	07/11/19 18:15	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	36		mg/kg	1.2	1.2	1		07/11/19 22:00	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04

Date Collected: 07/10/19 12:45

Client ID: RB26_0-2

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3840		mg/kg	8.50	2.29	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.25	0.323	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Arsenic, Total	9.02		mg/kg	0.850	0.177	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Barium, Total	67.8		mg/kg	0.850	0.148	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Beryllium, Total	0.297	J	mg/kg	0.425	0.028	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.850	0.083	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Calcium, Total	12500		mg/kg	8.50	2.97	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Chromium, Total	8.13		mg/kg	0.850	0.082	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Cobalt, Total	5.92		mg/kg	1.70	0.141	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Copper, Total	21.4		mg/kg	0.850	0.219	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Iron, Total	7990		mg/kg	4.25	0.768	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Lead, Total	43.8		mg/kg	4.25	0.228	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Magnesium, Total	1590		mg/kg	8.50	1.31	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Manganese, Total	80.5		mg/kg	0.850	0.135	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Mercury, Total	0.162		mg/kg	0.069	0.045	1	07/11/19 07:30	07/11/19 12:35	EPA 7471B	1,7471B	GD
Nickel, Total	10.9		mg/kg	2.12	0.206	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Potassium, Total	1460		mg/kg	212	12.2	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Selenium, Total	0.586	J	mg/kg	1.70	0.219	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.850	0.240	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Sodium, Total	306		mg/kg	170	2.68	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.70	0.268	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Vanadium, Total	18.1		mg/kg	0.850	0.172	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
Zinc, Total	123		mg/kg	4.25	0.249	2	07/11/19 09:10	07/11/19 18:20	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	8.1		mg/kg	0.88	0.88	1		07/11/19 22:00	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05

Date Collected: 07/10/19 13:00

Client ID: RB26_10-12

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	11200		mg/kg	8.31	2.24	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.15	0.316	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Arsenic, Total	1.23		mg/kg	0.831	0.173	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Barium, Total	170		mg/kg	0.831	0.144	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Beryllium, Total	0.307	J	mg/kg	0.415	0.027	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.831	0.081	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Calcium, Total	10400		mg/kg	8.31	2.91	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Chromium, Total	22.9		mg/kg	0.831	0.080	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Cobalt, Total	17.5		mg/kg	1.66	0.138	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Copper, Total	71.4		mg/kg	0.831	0.214	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Iron, Total	21700		mg/kg	4.15	0.750	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Lead, Total	22.8		mg/kg	4.15	0.223	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Magnesium, Total	6280		mg/kg	8.31	1.28	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Manganese, Total	275		mg/kg	0.831	0.132	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Mercury, Total	0.216		mg/kg	0.068	0.044	1	07/11/19 07:30	07/11/19 12:40	EPA 7471B	1,7471B	GD
Nickel, Total	21.8		mg/kg	2.08	0.201	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Potassium, Total	6720		mg/kg	208	12.0	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.66	0.214	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.831	0.235	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Sodium, Total	210		mg/kg	166	2.62	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.66	0.262	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Vanadium, Total	34.4		mg/kg	0.831	0.169	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
Zinc, Total	70.6		mg/kg	4.15	0.243	2	07/11/19 09:10	07/11/19 18:24	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	23	J	mg/kg	0.86	0.86	1		07/11/19 22:00	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06

Date Collected: 07/10/19 13:05

Client ID: RB26_14-16

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 60%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	13000		mg/kg	13.1	3.55	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Antimony, Total	1.26	J	mg/kg	6.57	0.500	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Arsenic, Total	8.48		mg/kg	1.31	0.273	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Barium, Total	29.9		mg/kg	1.31	0.229	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Beryllium, Total	0.684		mg/kg	0.657	0.043	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	1.31	0.129	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Calcium, Total	2440		mg/kg	13.1	4.60	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Chromium, Total	27.3		mg/kg	1.31	0.126	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Cobalt, Total	10.2		mg/kg	2.63	0.218	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Copper, Total	13.2		mg/kg	1.31	0.339	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Iron, Total	26700		mg/kg	6.57	1.19	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Lead, Total	10.7		mg/kg	6.57	0.352	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Magnesium, Total	6540		mg/kg	13.1	2.02	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Manganese, Total	341		mg/kg	1.31	0.209	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.105	0.069	1	07/11/19 07:30	07/11/19 12:42	EPA 7471B	1,7471B	GD
Nickel, Total	21.0		mg/kg	3.29	0.318	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Potassium, Total	2860		mg/kg	329	18.9	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	2.63	0.339	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	1.31	0.372	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Sodium, Total	342		mg/kg	263	4.14	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	2.63	0.414	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Vanadium, Total	35.2		mg/kg	1.31	0.267	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
Zinc, Total	63.0		mg/kg	6.57	0.385	2	07/11/19 09:10	07/11/19 19:23	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	27		mg/kg	1.3	1.3	1		07/11/19 22:00	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07

Date Collected: 07/10/19 13:55

Client ID: RB23_0-2

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5400		mg/kg	8.10	2.19	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Antimony, Total	1.97	J	mg/kg	4.05	0.308	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Arsenic, Total	7.79		mg/kg	0.810	0.168	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Barium, Total	231		mg/kg	0.810	0.141	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Beryllium, Total	0.259	J	mg/kg	0.405	0.027	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.810	0.079	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Calcium, Total	34800		mg/kg	8.10	2.84	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Chromium, Total	11.3		mg/kg	0.810	0.078	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Cobalt, Total	6.74		mg/kg	1.62	0.134	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Copper, Total	952		mg/kg	0.810	0.209	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Iron, Total	15900		mg/kg	4.05	0.732	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Lead, Total	2080		mg/kg	4.05	0.217	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Magnesium, Total	5270		mg/kg	8.10	1.25	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Manganese, Total	253		mg/kg	0.810	0.129	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Mercury, Total	0.088		mg/kg	0.069	0.045	1	07/11/19 07:30	07/11/19 12:44	EPA 7471B	1,7471B	GD
Nickel, Total	20.4		mg/kg	2.03	0.196	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Potassium, Total	2030		mg/kg	203	11.7	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.62	0.209	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Silver, Total	0.348	J	mg/kg	0.810	0.229	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Sodium, Total	257		mg/kg	162	2.55	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.62	0.255	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Vanadium, Total	15.7		mg/kg	0.810	0.164	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
Zinc, Total	425		mg/kg	4.05	0.237	2	07/11/19 09:10	07/11/19 19:28	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	11		mg/kg	0.86	0.86	1		07/11/19 22:00	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08

Date Collected: 07/10/19 14:05

Client ID: RB23_10-12

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6290		mg/kg	8.93	2.41	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Antimony, Total	0.554	J	mg/kg	4.46	0.339	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Arsenic, Total	2.30		mg/kg	0.893	0.186	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Barium, Total	26.9		mg/kg	0.893	0.155	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Beryllium, Total	0.259	J	mg/kg	0.446	0.030	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.893	0.088	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Calcium, Total	656		mg/kg	8.93	3.13	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Chromium, Total	8.65		mg/kg	0.893	0.086	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Cobalt, Total	4.81		mg/kg	1.79	0.148	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Copper, Total	7.24		mg/kg	0.893	0.230	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Iron, Total	10900		mg/kg	4.46	0.806	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Lead, Total	10.2		mg/kg	4.46	0.239	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Magnesium, Total	2190		mg/kg	8.93	1.38	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Manganese, Total	253		mg/kg	0.893	0.142	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.074	0.048	1	07/11/19 07:30	07/11/19 12:46	EPA 7471B	1,7471B	GD
Nickel, Total	9.62		mg/kg	2.23	0.216	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Potassium, Total	382		mg/kg	223	12.9	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.79	0.230	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.893	0.253	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Sodium, Total	43.4	J	mg/kg	179	2.81	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.79	0.281	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Vanadium, Total	11.6		mg/kg	0.893	0.181	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
Zinc, Total	27.8		mg/kg	4.46	0.262	2	07/11/19 09:10	07/11/19 19:33	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	8.6		mg/kg	0.94	0.94	1		07/11/19 22:00	NA	107,-	



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09

Date Collected: 07/10/19 14:10

Client ID: RB23_13-15

Date Received: 07/10/19

Sample Location: BRONX, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	11200		mg/kg	9.24	2.50	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Antimony, Total	0.508	J	mg/kg	4.62	0.351	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Arsenic, Total	5.21		mg/kg	0.924	0.192	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Barium, Total	112		mg/kg	0.924	0.161	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Beryllium, Total	0.277	J	mg/kg	0.462	0.031	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.924	0.091	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Calcium, Total	61400		mg/kg	92.4	32.4	20	07/11/19 09:10	07/11/19 21:41	EPA 3050B	1,6010D	LC
Chromium, Total	20.9		mg/kg	0.924	0.089	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Cobalt, Total	12.7		mg/kg	1.85	0.153	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Copper, Total	41.6		mg/kg	0.924	0.238	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Iron, Total	28200		mg/kg	4.62	0.835	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Lead, Total	62.4		mg/kg	4.62	0.248	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Magnesium, Total	9750		mg/kg	9.24	1.42	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Manganese, Total	332		mg/kg	0.924	0.147	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Mercury, Total	0.057	J	mg/kg	0.079	0.051	1	07/11/19 07:30	07/11/19 12:48	EPA 7471B	1,7471B	GD
Nickel, Total	19.6		mg/kg	2.31	0.224	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Potassium, Total	5570		mg/kg	231	13.3	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.85	0.238	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.924	0.262	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Sodium, Total	302		mg/kg	185	2.91	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.85	0.291	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Vanadium, Total	30.8		mg/kg	0.924	0.188	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
Zinc, Total	59.6		mg/kg	4.62	0.271	2	07/11/19 09:10	07/11/19 19:38	EPA 3050B	1,6010D	LC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	21		mg/kg	0.99	0.99	1		07/11/19 22:00	NA	107,-	



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG1258441-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	07/11/19 07:30	07/11/19 11:57	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-09 Batch: WG1258446-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Copper, Total	0.116	J	mg/kg	0.400	0.103	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Iron, Total	0.820	J	mg/kg	2.00	0.361	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Manganese, Total	0.336	J	mg/kg	0.400	0.064	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Sodium, Total	1.28	J	mg/kg	80.0	1.26	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	07/11/19 09:10	07/11/19 11:29	1,6010D	LC



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1258441-2 SRM Lot Number: D105-540								
Mercury, Total	94		-		60-141	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930096

Report Date: 07/29/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1258446-2 SRM Lot Number: D105-540					
Aluminum, Total	54	-	51-149	-	
Antimony, Total	140	-	19-249	-	
Arsenic, Total	92	-	70-130	-	
Barium, Total	81	-	75-125	-	
Beryllium, Total	85	-	75-125	-	
Cadmium, Total	96	-	75-125	-	
Calcium, Total	74	-	73-127	-	
Chromium, Total	78	-	70-130	-	
Cobalt, Total	89	-	75-125	-	
Copper, Total	82	-	75-125	-	
Iron, Total	66	-	38-162	-	
Lead, Total	83	-	71-128	-	
Magnesium, Total	67	-	63-137	-	
Manganese, Total	80	-	76-124	-	
Nickel, Total	90	-	70-131	-	
Potassium, Total	69	-	60-140	-	
Selenium, Total	89	-	63-137	-	
Silver, Total	82	-	69-131	-	
Sodium, Total	87	-	37-162	-	
Thallium, Total	93	-	68-132	-	
Vanadium, Total	79	-	65-135	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 Batch: WG1258446-2 SRM Lot Number: D105-540					
Zinc, Total	84	-	70-130	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1258441-3 WG1258441-4 QC Sample: L1930158-01 Client ID: MS Sample											
Mercury, Total	ND	0.154	0.124	80		0.125	82		80-120	1	20

Matrix Spike Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits			
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1258446-3 WG1258446-4 QC Sample: L1930158-01 Client ID: MS Sample												
Aluminum, Total	2950	190	2100	0	Q	2950	0	Q	75-125	34	Q	20
Antimony, Total	0.467J	47.6	42.9	90		43.4	91		75-125	1		20
Arsenic, Total	0.572J	11.4	11.7	102		11.4	99		75-125	3		20
Barium, Total	15.8	190	175	84		174	82		75-125	1		20
Beryllium, Total	0.295J	4.76	4.29	90		4.22	88		75-125	2		20
Cadmium, Total	ND	4.85	4.15	85		4.13	84		75-125	0		20
Calcium, Total	253	952	1090	88		1120	90		75-125	3		20
Chromium, Total	17.6	19	28.4	57	Q	32.0	75		75-125	12		20
Cobalt, Total	8.49	47.6	47.8	82		50.2	87		75-125	5		20
Copper, Total	9.25	23.8	26.6	73	Q	28.4	80		75-125	7		20
Iron, Total	12300	95.2	9190	0	Q	10900	0	Q	75-125	17		20
Lead, Total	1.58J	48.5	44.5	92		44.9	92		75-125	1		20
Magnesium, Total	719	952	1200	50	Q	1480	79		75-125	21	Q	20
Manganese, Total	122	47.6	111	0	Q	140	38	Q	75-125	23	Q	20
Nickel, Total	6.25	47.6	46.7	85		49.0	89		75-125	5		20
Potassium, Total	613	952	1140	55	Q	1390	81		75-125	20		20
Selenium, Total	ND	11.4	10.5	92		10.3	90		75-125	2		20
Silver, Total	ND	28.6	25.5	89		24.6	86		75-125	4		20
Sodium, Total	57.0J	952	846	89		816	85		75-125	4		20
Thallium, Total	ND	11.4	9.76	85		9.70	84		75-125	1		20
Vanadium, Total	19.9	47.6	57.0	78		58.9	81		75-125	3		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG1258446-3 WG1258446-4 QC Sample: L1930158-01 Client ID: MS Sample									
Zinc, Total	13.0	47.6	52.2	82	57.0	92	75-125	9	20

INORGANICS & MISCELLANEOUS

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-01
Client ID: RB24_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 11:45
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.7		%	0.100	NA	1	-	07/11/19 05:23	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.1	0.23	1	07/11/19 09:55	07/11/19 14:13	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.892	0.178	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-02
Client ID: RB24_8-10
Sample Location: BRONX, NY

Date Collected: 07/10/19 11:55
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.9		%	0.100	NA	1	-	07/11/19 05:23	121,2540G	YA
Cyanide, Total	ND		mg/kg	0.98	0.21	1	07/11/19 09:55	07/11/19 14:49	1,9010C/9012B	LH
Chromium, Hexavalent	0.245	J	mg/kg	0.852	0.170	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-03
Client ID: RB24_13-15
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:15
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	65.5		%	0.100	NA	1	-	07/11/19 05:23	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.5	0.31	1	07/11/19 09:55	07/11/19 14:56	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.22	0.244	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-04
Client ID: RB26_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 12:45
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.2		%	0.100	NA	1	-	07/11/19 05:23	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.1	0.23	1	07/11/19 09:55	07/11/19 14:18	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.877	0.175	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-05
Client ID: RB26_10-12
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:00
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.3		%	0.100	NA	1	-	07/11/19 05:23	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.0	0.22	1	07/11/19 09:55	07/11/19 14:19	1,9010C/9012B	LH
Chromium, Hexavalent	0.182	J	mg/kg	0.857	0.171	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-06
Client ID: RB26_14-16
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	59.7		%	0.100	NA	1	-	07/11/19 05:23	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.6	0.33	1	07/11/19 09:55	07/11/19 14:20	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.34	0.268	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-07
Client ID: RB23_0-2
Sample Location: BRONX, NY

Date Collected: 07/10/19 13:55
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.7		%	0.100	NA	1	-	07/11/19 05:23	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.0	0.21	1	07/11/19 09:55	07/11/19 14:21	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.863	0.172	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-08
Client ID: RB23_10-12
Sample Location: BRONX, NY

Date Collected: 07/10/19 14:05
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.4		%	0.100	NA	1	-	07/11/19 05:23	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.1	0.23	1	07/11/19 09:55	07/11/19 14:22	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.937	0.187	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

SAMPLE RESULTS

Lab ID: L1930096-09
Client ID: RB23_13-15
Sample Location: BRONX, NY

Date Collected: 07/10/19 14:10
Date Received: 07/10/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.1		%	0.100	NA	1	-	07/11/19 05:23	121,2540G	YA
Cyanide, Total	ND		mg/kg	1.2	0.26	1	07/11/19 09:55	07/11/19 14:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.986	0.197	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH



Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1258510-1									
Cyanide, Total	ND	mg/kg	0.89	0.19	1	07/11/19 09:55	07/11/19 14:03	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-09 Batch: WG1258598-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	07/11/19 11:00	07/11/19 22:00	1,7196A	NH

Lab Control Sample Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1258510-2 WG1258510-3								
Cyanide, Total	69	Q	83		80-120	17		35
General Chemistry - Westborough Lab Associated sample(s): 01-09 Batch: WG1258598-2								
Chromium, Hexavalent	88		-		80-120	-		20



Matrix Spike Analysis Batch Quality Control

Project Name: 404 EXTERIOR STREET

Lab Number: L1930096

Project Number: 170487001

Report Date: 07/29/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1258510-4 WG1258510-5 QC Sample: L1930096-01 Client ID: RB24_0-2												
Cyanide, Total	ND	10	10	94		10	94		75-125	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1258598-4 QC Sample: L1930096-07 Client ID: RB23_0-2												
Chromium, Hexavalent	ND	1040	971	94		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 404 EXTERIOR STREET

Project Number: 170487001

Lab Number: L1930096

Report Date: 07/29/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1258410-1 QC Sample: L1930158-01 Client ID: DUP Sample						
Solids, Total	82.4	81.5	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1258598-6 QC Sample: L1930096-07 Client ID: RB23_0-2						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: 404 EXTERIOR STREET**Lab Number:** L1930096**Project Number:** 170487001**Report Date:** 07/29/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930096-01A	Vial MeOH preserved	A	NA		5.4	Y	Absent		NYTCL-8260HLW(14)
L1930096-01B	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-01C	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-01D	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		TS(7)
L1930096-01E	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1930096-01F	Glass 60mL/2oz unpreserved	A	NA		5.4	Y	Absent		HOLD-CONTINGENCY(14)
L1930096-01G	Glass 120ml/4oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-01H	Plastic 8oz unpreserved	A	NA		5.4	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930096-01I	Glass 500ml/16oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-02A	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW(14)
L1930096-02B	Vial water preserved	B	NA		4.6	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-02C	Vial water preserved	B	NA		4.6	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-02D	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1930096-02E	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1930096-02F	Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		HOLD-CONTINGENCY(14)

Project Name: 404 EXTERIOR STREET
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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930096-02G	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-02H	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930096-02I	Glass 500ml/16oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-03A	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW(14)
L1930096-03B	Vial water preserved	B	NA		4.6	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-03C	Vial water preserved	B	NA		4.6	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-03D	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1930096-03E	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1930096-03F	Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		HOLD-CONTINGENCY(14)
L1930096-03G	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-03H	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930096-03I	Glass 500ml/16oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-04A	Vial MeOH preserved	A	NA		5.4	Y	Absent		NYTCL-8260HLW(14)
L1930096-04B	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-04C	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-04D	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		TS(7)
L1930096-04E	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1930096-04F	Glass 60mL/2oz unpreserved	A	NA		5.4	Y	Absent		HOLD-CONTINGENCY(14)
L1930096-04G	Glass 120ml/4oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930096-04H	Plastic 8oz unpreserved	A	NA		5.4	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930096-04I	Glass 500ml/16oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-05A	Vial MeOH preserved	A	NA		5.4	Y	Absent		NYTCL-8260HLW(14)
L1930096-05B	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-05C	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-05D	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		TS(7)
L1930096-05E	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1930096-05F	Glass 60mL/2oz unpreserved	A	NA		5.4	Y	Absent		HOLD-CONTINGENCY(14)
L1930096-05G	Glass 120ml/4oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-05H	Plastic 8oz unpreserved	A	NA		5.4	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930096-05I	Glass 500ml/16oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-06A	Vial MeOH preserved	A	NA		5.4	Y	Absent		NYTCL-8260HLW(14)
L1930096-06B	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-06C	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-06D	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		TS(7)
L1930096-06E	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1930096-06F	Glass 60mL/2oz unpreserved	A	NA		5.4	Y	Absent		HOLD-CONTINGENCY(14)
L1930096-06G	Glass 120ml/4oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-06H	Plastic 8oz unpreserved	A	NA		5.4	Y	Absent		A2-NY-537-ISOTOPE(28)

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930096-06I	Glass 500ml/16oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-07A	Vial MeOH preserved	A	NA		5.4	Y	Absent		NYTCL-8260HLW(14)
L1930096-07B	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-07C	Vial water preserved	A	NA		5.4	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-07D	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		TS(7)
L1930096-07E	Plastic 2oz unpreserved for TS	A	NA		5.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1930096-07F	Glass 60mL/2oz unpreserved	A	NA		5.4	Y	Absent		HOLD-CONTINGENCY(14)
L1930096-07G	Glass 120ml/4oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-07H	Plastic 8oz unpreserved	A	NA		5.4	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930096-07I	Glass 500ml/16oz unpreserved	A	NA		5.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-08A	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW(14)
L1930096-08B	Vial water preserved	B	NA		4.6	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-08C	Vial water preserved	B	NA		4.6	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-08D	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1930096-08E	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1930096-08F	Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		HOLD-CONTINGENCY(14)
L1930096-08G	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-08H	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930096-08I	Glass 500ml/16oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days



Project Name: 404 EXTERIOR STREET**Lab Number:** L1930096**Project Number:** 170487001**Report Date:** 07/29/19**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930096-09A	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW(14)
L1930096-09B	Vial water preserved	B	NA		4.6	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-09C	Vial water preserved	B	NA		4.6	Y	Absent	11-JUL-19 03:57	NYTCL-8260HLW(14)
L1930096-09D	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1930096-09E	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1930096-09F	Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		HOLD-CONTINGENCY(14)
L1930096-09G	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-09H	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(28)
L1930096-09I	Glass 500ml/16oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1930096-10A	Plastic 250ml unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1930096-11A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260(14)
L1930096-11B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260(14)

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GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name: 404 EXTERIOR STREET
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- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: 404 EXTERIOR STREET
Project Number: 170487001

Lab Number: L1930096
Report Date: 07/29/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.


EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 ALPHA <small>AMERICAN LABORATORY</small>	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #																				
			1 of 2	7/11/19	L1930096																				
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3268	Project Information		Deliverables		Billing Information																			
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Fax:		Turn-Around Time		Standard <input type="checkbox"/>		Due Date: 7/12/19																			
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Other project specific requirements/comments: 48-hr TAT send reports to data.management@langan.com				<table border="1" style="width:100%; border-collapse: collapse; font-size: x-small;"> <tr> <td style="width:5%;">PTAS</td> <td style="width:5%;">1,4 Dioxane</td> <td style="width:5%;">VOCs</td> <td style="width:5%;">SVOCs</td> <td style="width:5%;">PCBs</td> <td style="width:5%;">Pesticides/Herbicides</td> <td style="width:5%;">TAL Metals</td> <td style="width:5%;">Hex/Trichloro</td> <td style="width:5%;">Total Cu</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> </table>				PTAS	1,4 Dioxane	VOCs	SVOCs	PCBs	Pesticides/Herbicides	TAL Metals	Hex/Trichloro	Total Cu	X	X	X	X	X	X	X	X	X
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APPENDIX H

COMPLETED FISH AND WILDLIFE RESOURCES IMPACT ANALYSIS DECISION KEY AND MEMO

Appendix 3C Fish and Wildlife Resources Impact Analysis Decision Key		If YES Go to:	If NO Go to:
1.	Is the site or area of concern a discharge or spill event?	13	2
2.	Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13	3
3.	Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation?	4	9
4.	Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5
5.	Has the contamination gone off-site?	6	14
6.	Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7	14
7.	Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8
8.	Does contamination exist at concentrations that could exceed ecological impact SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14
9.	Does the site or any adjacent or downgradient property contain any of the following resources? i. Any endangered, threatened or special concern species or rare plants or their habitat ii. Any DEC designated significant habitats or rare NYS Ecological Communities iii. Tidal or freshwater wetlands iv. Stream, creek or river v. Pond, lake, lagoon vi. Drainage ditch or channel vii. Other surface water feature viii. Other marine or freshwater habitat ix. Forest x. Grassland or grassy field xi. Parkland or woodland xii. Shrubby area xiii. Urban wildlife habitat xiv. Other terrestrial habitat	11	10
10.	Is the lack of resources due to the contamination?	3.10.1	14
11.	Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14	12
12.	Does the site have widespread surface soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	12
13.	Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of potential resources. Contact DEC for information regarding endangered species.)	Section 3.10.1	14
14.	No Fish and Wildlife Resources Impact Analysis needed.		